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ABSTRACT

This Wisconsin guide uses hands-on experiences and food labs to help students examine their family and societal goals and how choices about food can help or hinder the realization of these goals. The guide challenges students to see the larger ramifications of their daily choices on the local and global community. The guide provides a prototype of the emerging family-focus approach to curriculum, instruction, and assessment. The book has five modules consisting of teaching-learning experiences, including conceptual statements, directed activities, and support materials designed to reflect the family-focus approach. The subconcerns addressed in the modules focus on: (1) Why should people be concerned about food, its meaning, and ways of obtaining and using it?; (2) What should families do regarding the development of food attitudes and norms?; (3) What should families and society do about food consumption patterns?; (4) What ought to be done about getting food?; and (5) What action should individuals, families, and society take in regard to food-related concerns? A course rationale, family narrative, and course description also are part of the guide. The five appendixes provide information about further reading, Wisconsin's educational goals and learner outcomes, the practical reasoning process, conceptual statements, and teaching about controversial issues. (EH)

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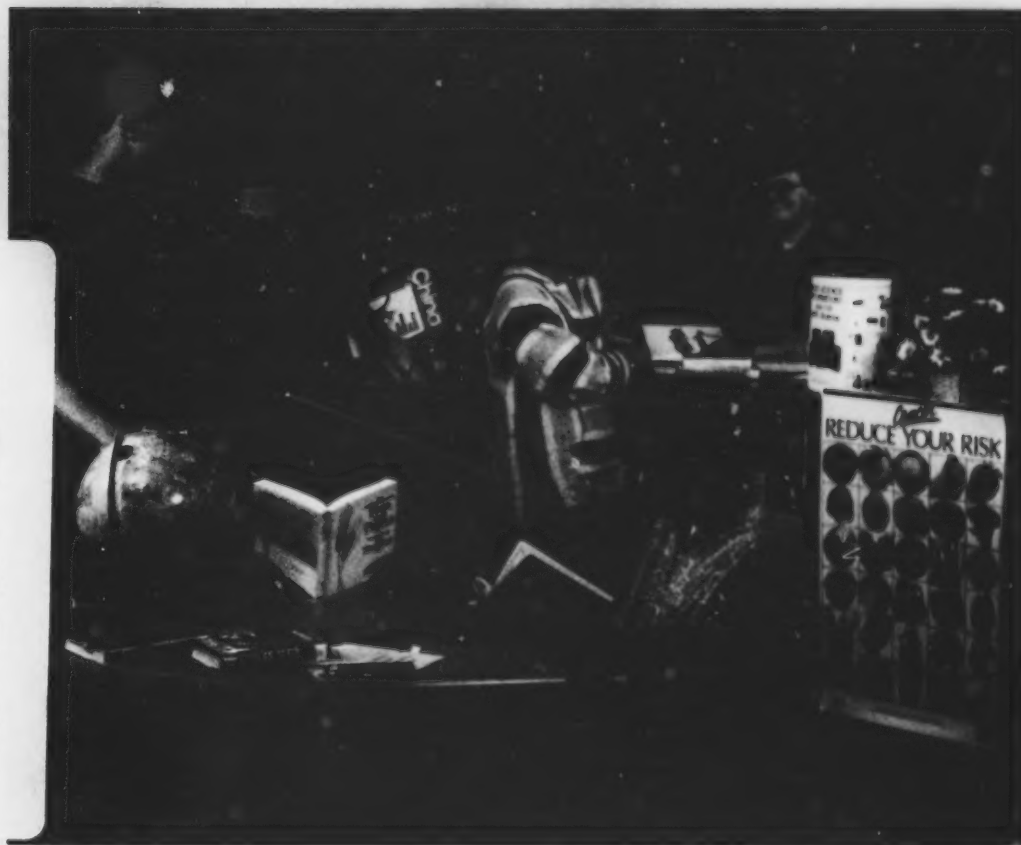
A TEACHER'S GUIDE

Family, Food, and Society

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Family, Food, and Society: A Teacher's Guide

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Foreword

When we ask what we should teach our children, we are also asking what skills we want the future citizens of our community to have. We want future citizens to know how to perform certain tasks, but we also want citizens who know how to analyze the goals that they will accomplish with these tasks. Our children are preparing for a world that presents them with many complex choices—one that requires critical thinking skills as well as technical skills.

Family, Food, and Society: A Teacher's Guide is part of an ongoing process to explore new possibilities and broaden the scope of what we teach in our family and consumer education classes. This process has involved the collaboration of many educators with a wide range of experience. *Family, Food, and Society* is an important contribution to the body of materials available for teachers because it suggests an approach to curriculum that challenges students to see the larger ramifications of their daily choices on their local and global community. Using hands-on experiences and food labs, students learn to examine their family and societal goals and how choices about food can help or hinder the realization of these goals.

I particularly like the ambition of this guide. The guide's premise is that we can expect more of our students. We can challenge them to take responsibility for their actions. And we can challenge them with complex subject matter because they are faced with complex choices in their daily lives. It is this sort of ambition that will foster quality citizens of the twenty-first century.

John T. Benson
State Superintendent of Public Instruction

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The impetus for rethinking what should be taught and learned in family and consumer education and the development of course guides came from a number of sources, including recent efforts to involve the entire learning community in improving schools and increased interest in stimulating innovation and development to achieve state-of-the-art curriculum practices.

At the national level, the field of home economics was renamed family and consumer sciences in 1994. In a parallel move, national vision and mission statements for family and consumer sciences education were developed and approved by the Family and Consumer Education Division of the American Vocational Association. A description of the framework is outlined in the brief, *Positioning the Profession for the 21st Century* (American Vocational Association, Family and Consumer Education Division, Strategic Planning Committee, October 1993). This work represents initial steps in developing national standards in family and consumer sciences education.

In Wisconsin, the family-focus approach to curriculum, instruction, and evaluation is based on the emerging view of family and consumer sciences education as a practical and critical science rather than a technical science. It is practical in the sense that efforts in teaching and inquiry focus on the development of family member-worker-citizens capable of reflective judgment and socially responsible action. It is critical in the sense that it addresses self-defeating patterns of thinking and acting that limit members' efforts to improve conditions in the home, workplace, community, and world. This approach draws on a wide range of research and writing, a sampling of which is listed in appendix A.

Several student learning goals based on concepts initially described in the Wisconsin Department of Public Instruction's *A Guide to Curriculum Planning in Home Economics* provide the conceptual foundation for developing the materials in this guide and supplementary assessment reference sets. These goals reflect expectations that the student

- shows insight about continuing concerns of the family;
- uses practical reasoning to address continuing concerns of the family;
- takes reasoned action (communicative, reflective, and technical action) to solve continuing concerns of the family;
- accepts the value of reflective action in directing and assessing one's own learning;
- shows interest in assuming responsibility as a family member-citizen;
- actively uses concepts related to work of the family; and
- shows critical awareness of self-defeating patterns of thinking and acting.

Since 1980, many K-12 teachers and university professionals, together with Department of Public Instruction consultants, have participated in various activities and projects to research and develop the conceptual framework, instructional content, and teaching-learning strategies for the emerging family-focus approach. They developed prototypes of various courses, including the Family, Food, and Society course, through a series of coordinated inservice and curriculum writing projects called Pilot School Phase I, Phase II, and Phase III. Project members collaborated in developing working knowledge about the emerging curriculum approach and concepts related to five continuing concerns of the

family: What should be done about family, food, and society? Family and jobs? Family and technology? Family work and careers? Parents and children? Their work will form the basis for five guides addressing each of these continuing concerns.

Co-investigation, curriculum planning, critical review, field testing of materials, and staff development all have been part of this guide's development process. The guide is not an end result in and of itself, but one part of an ongoing conversation to establish what should be taught and learned in family and consumer education.

Course Rationale

1

Introduction

The Need to Study Family Concerns About Food

Adolescence as a Time to Study Food Concerns

Unique Contribution of Family and Consumer Sciences

Summary

References

Introduction

This guide provides a prototype of the emerging family-focus approach to curriculum, instruction, and assessment.

This guide provides a prototype of the emerging family-focus approach to curriculum, instruction, and assessment. It is conceptualized as a course of study and offers family and consumer education teachers unfamiliar with the new approach an opportunity to learn by doing and by reflecting on experience. Teachers are encouraged to use the modules to help them better understand the emerging approach. By following the prototype, teachers can discover principles for making curriculum plans, for teacher-student interaction, and for designing instructional materials.

The following conversation among high school teachers after a critical-thinking conference reflects the type of dialogue this guide is designed to promote. In this conversation, teachers from several disciplines are exploring the connections among course offerings.

Pat: These survey results might be of interest as we think about the foods courses.

- Children age 5 to 7 years spend \$4.2 billion of their own money, of which a large portion goes for food and drink.

- In the 6- to 11-year-old category, 19 out of 20 youngsters visit fast food restaurants at least once a month.

As I recall, the keynoters were concerned about ways business and industry try to shape childhood, the needs of the family, and global politics. They used these data about children's spending and eating patterns to illustrate why preadolescence has been targeted as a new market.

Jesse: "Stats" like these certainly provide food for thought, but I'd like to see the whole report. It's difficult for me to interpret these data without finding out more about the survey, how it was conducted, who participated, and who sponsored the research.

Robin: I agree. What seems like isolated pieces of information may make more sense when we grasp the context in which these claims are made.

Lee: As important as it is to check sources of information, I'm more concerned about the keynoters' point about social influence and how this might relate to work of the family.

Jesse: This touches on something I find confusing about the notion work of the family. In its technical sense, the term *work* refers to manipulating or controlling things to accomplish a goal. When I use that word to refer to food, it's about making or doing things like growing a garden or preparing a meal. So when you say work of the family, for me it means planning, preparing, and serving meals. What does this have to do with social influence?

Pat: Maybe it would help if we stop a moment and review what we mean by work of the family?

Corey: Good idea. I read something that might help us get started. Besides responsibility for finding ways to meet family food needs, parents and guardians are the child's first foods teachers. Let's think about what that means?

Lee: To me the point about parents and guardians as teachers refers to communication. It is through communication in the family that food-related activities are coordinated, work is divided, food habits and attitudes are developed, children learn about social relations and develop standards for behavior, feelings and needs of members are met, and relationships to the outside world are developed.

Robin: But sometimes communication breaks down because of misunderstandings that occur in the family and social forces acting on the family. And this affects how food is defined, the development of eating habits, the use of family resources, and the use of natural resources.

Jesse: And I suppose that's where social influence enters the picture. Economic conditions and the practices involved in producing, processing, distributing, and marketing food affect what is available, its quality, and affordability.

Robin: Also, I think people are very concerned about the relationship between the tremendous growth of fast foods and convenience foods and changes occurring in family meals. For some, eating together is a way to express social ties and group solidarity.

Pat: It seems to me that we're saying there is a complex relationship between food and people. Food means much more than something to eat. It has social meanings and social values, and in some respects, food is a prime force of economics and global politics.

Lee: Let me see if I can summarize how critical thinking fits in. Family can be a place where members reflect on and discuss ideas. Members can make reasoned judgments and act to improve conditions that affect the family's ability to do its work.

Corey: And food is one of those application areas of serious concern to the family and society. Hands-on experiences using food can help students make connections to everyday problem solving.

Robin: I can see how family and consumer education contributes to our common interest in the development of critical thinking skills. That is, the family and consumer education program assists students in developing the understandings, attitudes, and skills that enable them to fashion their own lives as family members, workers, and citizens *and* to address questions of continuing concern to the family unit and society.

Corey: And in this way family and consumer education supports and complements the family as a social institution.

Lee: Jesse's expression, "food for thought" really fits, doesn't it!

...there is a complex relationship between food and people.

Family can be a place where members reflect on and discuss ideas.

Family, Food, and Society: A Teacher's Guide provides a way to communicate with others about family and consumer education. It is intended for use in dialogue among classroom teachers, teacher educators, administrators, and community members to help them

- communicate and reach a shared understanding about the family-focus approach to curriculum, instruction, and assessment;
- recognize the significance of food-related concerns of the family; and
- appreciate the unique contribution family and consumer education can make to learning.

As understanding and appreciation evolve, this guide will provide the basis for critically reviewing, rethinking, and redirecting family and consumer education programs and courses.

This chapter focuses on the rationale for school involvement in exploring family concerns about food. It establishes the basis and general guidelines for creating the Family, Food, and Society course.

The Need to Study Family Concerns About Food

An integral part of family work involves providing for family members' material well-being and includes those actions involving food. Even though food is a central concern to everyone, satisfaction of food needs is often taken for granted in the United States. Too often people make food-related choices without much thought.

Whether from ignorance or carelessness, this inclination to react in an impulsive and self-indulgent manner toward food has had serious and harmful consequences in every aspect of daily life for individuals and nations alike. Cycles of indulgence have led to over- and undernourishment in some segments of the population and unnecessary waste of valuable resources. This has had effects at the family, national, and global level, including harm to physical, emotional, economic, and environmental health.

There is a need to break these cycles of unreflective social behavior (Roth, 1990). To accomplish this, family members must study the role and obligation the family has in these matters and help members develop the knowledge and the intellectual and social skills needed for reasoned action. Three more specific aspects of the family's role regarding food involve promoting the development of healthy food attitudes, helping members understand and evaluate the impact of rapid social change on food practices, and helping them adapt to increased interdependence and complexity.

First, individuals acquire many food attitudes and practices in the family. Thus, the family can help prevent cycles of self-defeating behavior by assisting members with interpreting the context in which their food concerns arise and in recognizing beliefs and attitudes that interfere with family work.

Second, the family can help members understand and evaluate social pressures to conform, persuasive arguments about *real* needs, and an overwhelming amount of conflicting, sometimes contradictory, information about food and nutrition. Also, the family can help members cope with the confusion, frustration, and conflict that accompany difficult questions about food consumption.

Individuals acquire many food attitudes and practices in the family.

Third, food procurement involves complex, interdependent relationships among individuals, families, and societies. The family is obligated to consider the consequences its actions have for others. The family also assists members in developing the intellectual and social skills involved in procuring food responsibly, including independent thinking, perspective taking, and relating interdependently.

Adolescence as a Time to Study Food Concerns

Food is a concern for adolescents because adolescents are at risk, from a physiological and social-psychological standpoint, of developing nutritional problems (Story and Resnick, 1986; Chapman and Maclean, 1993). Even if they are well-informed about good health practices, this information is often useless without the development of attitudes that support conceptual learning and active use of knowledge. Changes in habits of thinking and acting do not occur in a vacuum. They require carefully crafted learning experiences adapted to differences in learning needs, something the school is equipped to do. Thus, school-based programs need to help youngsters become more deliberate and reasoned in their thinking about food.

In democratic societies, the school plays a significant supplemental role in developing citizens. According to the Department of Public Instruction's *A Guide to Curriculum Planning in Home Economics*, adolescence is an optimal time to study food concerns because the developmental stage allows for a "movement from concrete, simple, and dependent learning, thought, and action to more abstract, complex, and self-forming learning, thought, and action" (Staaland, 1987). Thus, the Family, Food, and Society course was designed specifically to meet learning needs of adolescents, recognizing that adolescent learners

- initially tend to think about food-related concerns in a technical, narrow way.
- may not be aware of the complexities involved in food-related concerns.
- are confused by conflicting information and values presented to them by various social forces, such as the media, government, and business and industry.

However, theory and research on adolescent development suggests that they are ready to

- become more reasoned and deliberate.
- learn conceptually.
- monitor their own learning and set new learning goals.
- integrate their own food-related experiences, including traditions, norms, and practices.
- develop intellectual and social processes that will enable them to take reasoned action on food-related concerns.
- examine representative ideas rather than learning all the pieces of information associated with a given topic.

Food is a concern for adolescents because adolescents are at risk, from a physiological and social-psychological standpoint, of developing nutritional problems.

■ Figure 1

Approaches to Food-Related Courses

Primary Characteristics	Course Using Conventional Approaches	Course Using Emerging Approach
View of Family	Focuses on technical tasks in the home to fulfill immediate needs. Emphasizes the development of family members as individuals and a personalized sense of family reacting to change.	Works to create conditions in family and society that promote self and societal development. Addresses and solves continuing concerns of family. Is concerned about long-term consequences of actions.
View of Society	Emphasizes societal norms and rules.	Questions social conditions. Believes society is made up of individuals and families who can direct and shape conditions.
View of Food Attitudes and Practices	Primarily views food as nourishment for the body. Prepares food according to prescribed methods for family to consume in set patterns.	Critically examines food for multiple meanings. Adapts food to meet changing needs of individual and family. Views food from historical and cross-cultural perspectives.
Aim of Course	Emphasizes competence in subject matter related to food.	Emphasizes development of knowledge, skills, and attitudes for reasoned judgment and action regarding food-related concerns of the family.
What is Taught	Includes subject matter and skills that are most efficient for planning basic meals and food preparation. Teacher instructs student.	Includes subject matter and intellectual and social skills that enable family members to take reasoned action. Studies concerns of family in regard to what ought to be done about the family, food, and society. Teacher and student are co-investigators.

Unique Contribution of Family and Consumer Sciences

Family and consumer sciences (formerly home economics) as a practical and critical science focuses on the diagnosis and solution of practical problems of the family (Brown and Paolucci, 1979). The solution to these practical problems requires the selection, reorganization, and use of knowledge about goals, context, means, and consequences in reasoning about what to do (Strom and Plihal, 1989). In this approach, professionals assist individuals and families in developing the understandings, confidence, and skills needed to address these problems.

The practical science approach differs dramatically from prior approaches to home economics education in its views about the aim, content, and process of education (Brown, 1978). Several states have used the practical science approach as a basis for conceptualizing curriculum. Wisconsin developed a family-focus approach that centers on the work of the family. (The research and ideas of many people have contributed to this approach, some of which are referenced in appendix A, Further Reading.) This new approach is referred to as family and consumer education. More recently, practical and critical science provided a basis for the redirection and renaming of the profession at the national level to family and consumer sciences.

Approaches to Course Development

Conventional approaches to foods and nutrition courses often emphasize efficient, economical preparation of food and the mastery of subject matter and technical homemaking skills. In contrast, the emerging family-focus approach emphasizes food-related concerns of the family and the development of autonomous, socially responsible family members and citizens capable of reasoned action that addresses these concerns. Family concerns about food and nutrition are interdisciplinary problems with roots in social psychology, economics, politics, psychology, cultural anthropology, philosophy, history, linguistics, and biochemistry (Brown, 1980). The differences between these approaches to course development are summarized in figure 1.

In this emerging approach, family members gain the background in subject matter and intellectual and social processes necessary for making reflective judgments and taking reasoned action. This involves the critical examination of goals. The examination of goals requires knowledge of the values embedded in the concern, the sources of those values, the interests served by those values, and the consequences of upholding particular goals. Additionally, the teaching and learning of intellectual and social processes must accompany knowledge development in order for students to learn to use reasoning as a basis for judgment and action. Food-related concerns require complex judgments because there are varying traditions, views, beliefs, and practices connected to making choices in particular situations. Social forces, such as the media, government, and business and industry, influence people's thinking and acting, thereby complicating the judgment process.

*Family concerns
about food and
nutrition are
interdisciplinary
problems....*

*The family takes
three interrelated
and interdependent
kinds of reasoned
action to
accomplish family
goals.*

Family, Food, and Society: A Teacher's Guide supports Wisconsin's mission for family and consumer education, which is self-development and societal formation. To accomplish this, the family takes three interrelated and interdependent kinds of reasoned action.

The technical system of action deals with know-how, procedures, and manipulation of objects toward a predetermined, unquestioned end.

The communicative system of action explores meanings of ideas and the process of gaining reasoned consensus among individuals and groups of people. It also involves examining ideas for their underlying logic.

The reflective system of action frees individuals and families by examining unconsciously held views that tend to predominate in a society.

All three systems of action should be used to address food-related concerns of the family. Frequently, families' actions have focused on technical action, such as how to purchase and prepare food. Due to the complexity of food-related concerns, however, including ever-changing food-related knowledge, mere factual, technical information becomes outdated and insufficient for reasoned action regarding food. Families must examine meanings, values, and beliefs using the communicative and reflective systems of action. In reality, these systems of action and the intellectual and social skills embedded in them are linked. Action is the rationale culmination of judgments about what to believe and do.

Summary

The emerging family-focus approach to curriculum, instruction, and assessment calls for new roles for students and teachers as co-investigators. The following principles should guide the curriculum and instruction process.

- The subject matter of a family-focus course about food is interdisciplinary. It combines and reorganizes knowledge from a variety of disciplines to create new knowledge.
- Due to the changing nature of food-related knowledge, memorizing mere technical information is of little value. The course should emphasize the formation of representative concepts and the development of appropriate intellectual and social skills, including practical reasoning and family systems of action.
- Since food-related actions have important consequences for individuals, the family unit, and society, students should learn strategies for collective action.
- Individuals and families need to learn more about food-related meanings, processes, conditions, and events as they occur in different contexts.
- Students should develop a sense of their *real* physical, emotional, and social needs and the ways food might satisfy these needs.
- Food-related knowledge can be organized around four subconcerns: development of food attitudes and norms, patterns of food consumption, obtaining food, and actions taken regarding food.
- The course should encourage students to adapt what they learn for everyday use.

Chapter 2, Family Narrative, is a story exploring the family's and society's broad continuing concern about food. It provides the theory and research for a family-focus course about food. Chapter 2 contains descriptions of the conditions affecting choices families make in addressing food-related concerns and the ways families examine and select food-related goals.

The course description in chapter 3 provides information about curriculum assumptions, including learning goals and the conceptual framework used in selecting and organizing curriculum content. The overview for each of the five modules includes the continuing concern or sub-concern under consideration, a description of the module, specific course questions that are addressed in the module, and the broad subject matter concepts, intellectual processes, and social skills that are emphasized in the module. Chapter 3 ends with a section on how to use the modules.

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Family Narrative

2

Introduction
The Context of Food-Related Concerns
Current State of Affairs Regarding Food
Alternative Valued Ends
Identifying Continuing Concerns of the Family
Summary
References

Introduction

The Family Narrative explores the significance of the family's continuing concerns related to obtaining, consuming, and using food.

The Family Narrative explores the significance of the family's continuing concerns related to obtaining, consuming, and using food. A continuing concern is one that recurs over time and is experienced by different kinds of people. The broad continuing concern explored in this guide is, What ought to be done about food for the family in society?

Continuing concerns emerge in everyday life when individuals and families experience a discrepancy between the existing situation and the goals they want to achieve. Action or inaction to address and solve these concerns has powerful intellectual and social consequences for the individual, family, and society. Thus, individuals and families play an important role in encouraging family members to be more reasoned and deliberate in their food-related beliefs and practices within the family, and acting collectively as citizens to influence food-related policies that help the family as a social institution.

The chapter is divided into four parts. The first two parts focus on important dimensions of context of food-related concerns and the current state of affairs regarding food in United States society. The third part deals with defining valued ends, which are goals that families consider important. The fourth part identifies some of the continuing concerns of the family that emerge in everyday life.

The Context of Food-Related Concerns

Continuing concerns of family about food arise in a particular historical, social, and cultural context. A good place to begin understanding the factors involved in contemporary food-related concerns is to examine the role of history in shaping the present situation.

Historical Context

Over time, people have come to view food differently due to changes in nearly every aspect of life.

Thousands of years ago, humans foraged for food in the wilderness, eating whatever plants and animals were available. Food-related tasks occupied a major portion of the day. People's relationship to food was probably dictated by its importance to basic survival. Over time, people have come to view food differently due to changes in nearly every aspect of life.

The following generalizations of food-related views and practices during various eras illustrate some of these changes. Unless otherwise cited, information regarding these eras is based on *The Cultural Feast: An Introduction to Food and Society* by Carol Bryant, Anita Courtney, Barbara Markesbery, and Kathleen DeWalt. The changes associated with these general eras have occurred at different times in different societies.

Agricultural Era

In the agricultural era, food consumption depended on social status. At one time, nearly everyone was involved in obtaining food. With the invention of new equipment and tools, fewer people were required to work with crops

and food. Thus, people were able to pursue other interests, including profit-making businesses. This led to even greater differences in status and rank among people. Food, then, became one means of social distinction, with food patterns varying considerably from people who did manual labor to merchants and large landowners.

In the United States, the early colonists, who initially depended on imported foods from England as their staples, gradually assimilated locally grown foods into their diets. As they began to trade food with people of different regions, dietary patterns slowly changed, providing a greater variety of foods.

Industrial Era

The industrial revolution dramatically influenced views of food as well as consumption and procurement practices, especially with the introduction of factories and the accompanying rise of industrial urban centers. Even though factory workers often had poor housing and living conditions, food was more readily available because of advances in transportation, refrigeration, and mass production. At this time, factory workers and their families began to eat three meals a day organized around the factory workday. The food supply was viewed as secure, with even fewer people involved directly in the procurement of food. The actual foods people ate were still determined by status, though. Merchants, bankers, and lawyers could afford a much wider range of foods than could factory workers.

In the United States, the growing food industry influenced family eating habits through advertising high-profit foods. Foods that involved processing and packaging cost more and had high profit margins.

...the growing food industry influenced family eating habits....

Technological Era

The biggest influence on contemporary views of food, consumption patterns, and procurement practices in the United States is the food industry. Through the use of complex technology, new products and processes have been developed to take the place of old ones. Families have more food choices than ever. They consider nutrition, convenience, and economy on a daily basis. People tend to view food as a source of enjoyment and pleasure despite media warnings about dangerous additives and harmful chemicals included in the food supply. Convenience is an important factor in food choices, especially with major changes in family lifestyles and structures. In their book *Food Trends and the Changing Consumer*, authors Ben Senauer, Elaine Asp, and Jean Kinsey note that "Time demands often conflict directly with the desire to eat healthfully, and balancing these two needs is a constant challenge for consumers and food sellers alike" (1991, p. 62).

Commonalities Among the Eras

Food-related practices in all three eras have commonalities. First, obtaining and consuming food is a complex daily process in all societies and among individuals and families of all ethnicities, ranks, and social standings. Second, these practices have always required time and thought. Third, in order to obtain food, individuals, families, and societies must work interdependently. Even when societies are loosely organized and small in size, a certain degree of interdependence between individuals and families is necessary for survival. In some societies, an individual's obligations are limited to only a few people consisting mainly of family members and neighbors.

Today, with increasingly complex and diverse families and societies, people must work interdependently to an even greater degree to obtain food. Obligations to others extend beyond family and society to people throughout the world. The demands of people in developed countries such as the United States are having an adverse effect on the natural resources base and the food self-reliance of developing countries (Gussow and Clancy, 1986).

Of course, individuals, families, and societies practice independent food-related behavior to a greater or lesser degree. But these actions tend to take place within a framework of interdependence. Few individuals, families, or societies are able either to obtain and use food in isolation of others or to rely totally on others for their food supply.

Social Forces

Throughout history, social forces—family, religious beliefs, educational institutions, media, and the popular culture—have influenced food-related attitudes and practices. The influence of these forces has changed greatly over time. At one time, the family and church seemed to have the biggest impact on people's ideas regarding food. Now the two most powerful institutions in society affecting food attitudes and practices are the government and food corporations. Family members can be influenced by these forces without their awareness. An article in the *Journal of Nutrition Education* states that "food and beverage advertisers are using nutrition claims at a higher rate than ever before... Programs and materials are needed to help consumers sort out valid nutrition claims from those that are incomplete or inaccurate" (Hickman, et al., 1993). In the book *Paradox of Plenty: A Social History of Eating in Modern America*, author Harvey Levenstein expresses the hope that government's role in food information will change through "a rethinking of the role of government in telling people what to eat and—more important, for they are still the main source of nutritional information—more restrictions on food vendors' ability to alarm and deceive the public by distorting the health benefits of their products" (1993). These views attribute great significance to the roles these institutions play in influencing food-related practices.

Current State of Affairs Regarding Food

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Existing conditions affect the choices families make and actions they take to address and solve food-related concerns. These conditions governing attitudes and practices are changing at such a fast pace that individuals, families, and societies lack the sense of tradition that once permeated life. Unless people understand the contextual changes that affect food attitudes and practices, they are unable to take reasoned action regarding food concerns.

Changes in Food Attitudes

As societies have moved away from an agricultural base, ways of thinking about food have changed. The following three attitudes about food are of particular concern because of the far-reaching consequences these attitudes have on individuals, families, and societies.

Food as an Unlimited Resource

New technology has created an abundance of food, most of it produced outside the home. As a result, food in many societies, particularly the United States, tends to be taken for granted. An article in *Family Perspective* notes that as technology provides new opportunities, people begin to expect more. A new perspective then becomes the norm and "what was novel a short period before now becomes something that is taken for granted" (Bensen, 1985). Because people view food as an unlimited resource, they tend to buy it without first establishing criteria for their choices. When this happens, the likelihood of impulse buying and unnecessary waste of resources increases.

Food for Enjoyment and Pleasure

More and more people view food as a means of enjoyment and pleasure rather than simply as a means of survival. A *Journal of Nutrition Education* article by Marsha Hudnall and Nancy Wellman comments that "A majority of Americans rate enjoyment above nutrition when it comes to making a decision about eating a particular food..." (1992). Technology has allowed people to enjoy new food forms and to experience new taste sensations that were once limited to specific regions or countries.

The food industry has capitalized on this changing view of food, providing the desired products, tools, and equipment to meet these perceived needs. However, not all people can afford to spend their food dollar on enjoyment. That fact creates social distinctions. For instance, the costs of some foods are so high that certain groups of people who cannot afford them either do without or spend their precious dollars on them in an attempt to gain acceptance and belonging.

However, not all people can afford to spend their food dollar on enjoyment.

Food as Power and Control

Many individuals, families, and societies look upon food as a way to maintain power and control over others, thereby improving their own status. In this way, certain food-related ideas, consumption patterns, and procurement procedures might serve the interests of just a few people. Slenderness has become a preoccupation for many North American men and especially women who consider a slim figure to be the only attractive one (Way, 1995). Michele Grodner of the Community Health Department at William Paterson College notes that "chronic dieting syndrome" is a term used to describe the food consumption behaviors of those who, obsessed with physical appearance, "...incorporate chronic dieting as a permanent aspect of their lifestyles" (1992). The diet industry is now a multimillion-dollar business as millions of people turn to diet pills, diet foods, and other weight-reducing potions in the quest for thinness. In the *Journal of Nutrition Education*, Stephen Lewis writes, "...in the United States of America, five billion dollars annually is spent to lower calorie consumption, while 400 million people in the rest of the world can rarely find an adequate number of calories to consume" (1992). Unfortunately, this image of the ideal body size and the methods used to achieve it often have serious personal consequences. Body-image problems, low self-esteem, cycles of bingeing and purging, and insufficient nutrition can result from the obsession with thinness.

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Changes in Food Consumption

Technology has not only resulted in changed attitudes toward food but also in changed consumption patterns. Technological advances have provided access to a greater variety of food. New methods of food transportation and storage have extended the availability of seasonal foods, brought foods from other regions, and provided alternatives to the daily task of food preparation.

Technology has also increased the availability of prepared convenience foods, thus providing families, especially those in highly developed countries, with ways to save preparation time. Although purchasing prepared foods may cost more, many people are willing to make this exchange for the time that can be saved. Prepared foods have also led to more individualized eating patterns. Snacking and grazing have become common practices that tend to replace the family meal. Thus, parents, traditionally responsible for their children's nutritional choices, have less control over their children's diet.

Eating away from home is another trend that has resulted from social and technological change. In the United States, most people can eat whenever they are hungry, regardless of where they are and the people around them. Senauer, Asp, and Kinsey suggest that "Take-out or delivered food is especially appealing to households where all the adults are employed in the labor force, even though its price is two to three times that of comparable homemade dishes" (1991, p. 9). They note that take-out-to-eat (TOTE) food is becoming very attractive to busy families, especially dual-earner households, and that "Between take-out food and dining out, some households have virtually given up cooking except for special occasions." Even if meals are eaten together as a family outside the home, patterns of family interaction and the socialization of children may differ from those that occur at home. Public places are not as conducive to intimate conversations.

Changes in Food Procurement

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affected food
procurement
practices.*

Technology has also affected food procurement practices. Growing dependency on others for food and a reliable, safe food supply are two areas of continuing concern.

Depending on Others for Food

Rapid and dramatic technological advances have led the majority of individuals and families to rely almost solely on businesses and corporations for their food. As Joan Gussow, professor at Columbia University, and Katherine Clancy, professor at Syracuse University, point out, this is not surprising considering that "progress" has turned producers into consumers who are dependent on others and who can do less and less for themselves (1986). As families become occupied with nonfood-producing activities, their demand for convenient food items produced by the food industry increases. In return, businesses and food manufacturers rely on busy families to purchase the high-profit convenience food items.

Understandably, industry is concerned with making a profit. But, this greatly influences food procurement practices. For example, the multibillion-dollar food processing industry devotes much of its resources to encouraging consumer demand for new products that compete with traditional ones for food dollars when consumers do not actually need anything new (Bryant, et

al., 1985). Senauer, Asp, and Kinsey state that "most television advertisements for food products and other consumer goods have little factual information... The desired result is to cause a subconscious change in viewers' attitudes that ultimately affects their purchase decisions" (1991, p. 174). Gussow (1985) states that the average supermarket has more than 12,000 items. The purpose of many of these items would be unclear if it were not explained by advertising. Therefore, procurement practices frequently are shaped by the interests of the food industry rather than by the actual needs of individuals and families.

Safe Food Supply

Although a safe food supply has been a continuing concern, the type of questions individuals and families ask about safety has changed. Rather than being primarily concerned about food spoilage due to lack of refrigeration or inadequate home processing techniques, individuals and families are now thinking about the effect of additives, pesticides, and potentially harmful chemicals on their bodies.

Due to media coverage of issues such as pesticide residues, product tampering, and health claims of food labels, consumers are aware of health risks of questionable food safety practices. Moreover, confusion exists over who is to provide the necessary protection to consumers. Consumer groups, food producers and marketers, government regulatory agencies, public health organizations, and the scientific community disagree about what action is considered appropriate. Some of the issues central to these controversies include

- the lack of definitive scientific evidence about nutrition and disease prevention,
- varying opinions about the significance of consensus and standardization of information,
- questions about the particular motives of private sector information suppliers, and
- concern over the effectiveness of nutritional information in improving food choices (Glanz, et al., 1989).

Consumer groups have acted on behalf of the family by questioning other agencies or organizations. The April 1989 issue of the *Nutrition Action Healthletter*, a newsletter sponsored by the Center for Science in the Public Interest, included this statement: "...the FDA [Food and Drug Administration], which has the responsibility to monitor our food supply for pesticide residues, isn't doing a very good job. It doesn't regularly test for about half the pesticides that could be present. And it doesn't sample randomly" (Lefferts, 1989). Such groups express concern over pesticide use in food production and the lack of government action in regulating the food supply. Moreover, consumer advocates claim: that many of the food additives and processing techniques are dangerous to one's health; the use of additives has been linked to cancer, allergic reactions, and other health problems (Bryant, et al., 1985).

Some experts, though, believe pesticides and preservatives have made the food supply safer. The American Council on Science and Health credits pesticides for contributing to a safe food supply. According to one of its members, "Americans certainly enjoy the safest and most wholesome food in the history of mankind" (Kroger, 1985). *The Cultural Feast: An Introduction to Food and Society* notes that, "More than ever before, consumers are

...the type of questions individuals and families ask about safety has changed.

free from the risk of acute food poisoning from spoiled food and food-borne microorganisms because of refrigeration, advanced canning and processing techniques, federal inspection programs, and the use of preservatives and other additives" (Bryant, et al., 1985, p. 144).

Alternative Valued Ends

Responsibility and degrees of freedom are two factors that influence how a family defines its goals.

The term "valued ends" refers to the goals or results that families consider important. In some families these goals are not openly discussed, but they are evident in what family members say and do. Proactive families are more likely to work cooperatively on conceptualizing, critically examining, and justifying their goals. Most people list emotional, social, and physical well-being as goals. However, they may define well-being differently. Depending on how well-being is defined, the consequences of pursuing these goals may or may not be harmful to themselves or others.

Responsibility and degrees of freedom are two factors that influence how a family defines its goals.

Responsibility is used here to refer to the sense of commitment individuals and families feel toward fulfilling obligations regarding food for themselves and others. It involves considering the consequences of food-related actions.

Degrees of freedom refers to the amount of control one has in everyday choices and family action. Context influences how much control one has. Constraints on freedom might be imposed internally or externally.

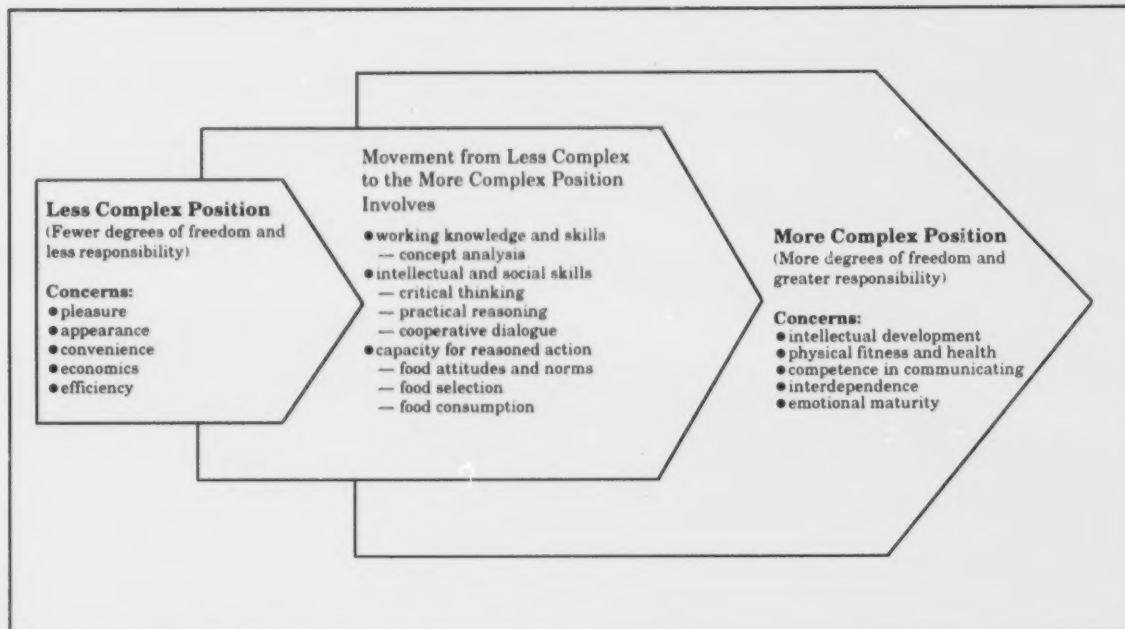
Responsibility and degrees of freedom are interrelated and are not mutually exclusive. Individuals or families can have strong feelings of responsibility toward themselves and others yet have little or no freedom to take action. A family with limited economic resources might act responsibly in the context of everyday life but lack resource power to change their food choices in a way that is more consistent with their values. For example, products with packaging designs and materials that protect the environment often cost more. Similarly, individuals and families can have plenty of money, yet show little control and responsibility toward themselves and others in their judgments and actions.

The complexity created by the interrelatedness of responsibility and degrees of freedom may lead to inconsistency between beliefs and action. For example, individuals may say they believe in environmental conservation yet choose to buy foods wrapped in packaging that is not biodegradable or recyclable and hence potentially destructive to the environment.

In making choices about food, individuals use a variety of thinking patterns and actions to achieve their goals. Figure 2 shows different patterns of thinking and acting about food ranging along a continuum from a less complex to a more complex position. The position on the left represents a less complex pattern of thinking and acting. People using this pattern may buy and consume food without consideration of the long-term consequences for themselves and others. The right-hand position involves a more complex pattern of thinking and acting. People in this position buy and consume food after careful consideration of possible environmental, health, and social consequences to all interested parties. The following sections contain a description of the two extreme positions on the continuum, typical justifications given to support these positions, and some consequences of using these processes of thinking and acting.

...individuals use a variety of thinking patterns and actions to achieve their goals.

A Developmental Continuum of Processes Used to Define Family Goals



The Less Complex Position

People who adopt the less complex position take little responsibility for the well-being of themselves and others. In this position, people use food without giving careful thought to their own and others' basic needs. This can be especially self-destructive when people use food as a substitute for relationships or emotional expression, such as eating when lonely. In using food as a solution to their problems, people overlook the source of the problem. Behavior in the less complex position promotes family and societal goals of self-indulgence.

Along with exercising little or no responsibility for the consequences of actions to themselves and others, individuals thinking and acting in this pattern have fewer degrees of freedom. The amount of control they have in making choices is heavily influenced by external forces, such as economic resources, the media, cultural tradition, and geographic area. Family members can be influenced by these forces without their awareness.

The less complex position is guided by principles of pleasure, appearance, convenience, economics, and efficiency. Obviously, consideration of economy and efficiency is relevant. However, these values often conflict with other human interests. For example, prepackaged lunches for children may look attractive, taste great, and save time, but they cost more and hurt the environment with their excess packaging.

In the less complex position, people use food without giving careful thought to their own and others' basic needs.

The principles that guide this position are largely unquestioned. Taken alone, the principles underlying the less complex position emphasize materialistic goals and self-serving behavior. This behavior may be appropriate in certain situations, but it is not appropriate most of the time. Families should ask: Best for whom? When? Under what circumstances? and With what consequences to all parties directly and indirectly involved?

Reasons to Support the Position

The less developed position often goes unjustified. But if pushed to give reasons, individuals and families might defend their beliefs. It is a less time-consuming pattern of thinking and acting regarding food. They do not have to think much about their food choices. Unhampered by food-related concerns, life may seem simpler and free from worry.

Consequences to Oneself and Others

As a result of this pattern of thinking and acting, people frequently do not meet the basic physical need for nutrients to sustain a healthy existence. Without sufficient nutrients, it is more difficult to focus on building a sense of community and belonging, and finding meaning and a sense of purpose in life.

As issues and concerns reappear over time, the impulsive, self-centered lifestyle may lead to increased dissatisfaction, alienation, and despair (Mische and Mische, 1977). Also, individuals and family members might lack consistency, control, and a sense of predictability in their lives. When food choices are made by whim or out of habit, little thought is given to the assumptions underlying one's beliefs or the consequences these beliefs and choices might have for individuals and society in the long run.

The more complex position, representing a deliberate definition of family and societal goals regarding food, includes more degrees of freedom and a highly developed sense of responsibility.

The More Complex Position

The more complex position, representing a deliberate definition of family and societal goals regarding food, includes more degrees of freedom and a highly developed sense of responsibility. Concerns about efficiency and economy are balanced with principles of fairness, justice, equality, and freedom. In this position, responsibility involves deliberately seeking to promote interdependent relationships and betterment of oneself and others, meaning the development of optimum physical, social, emotional, and conceptual health.

Physical well-being refers to having a healthy, well-functioning body that gets sufficient nutrients, adequate sleep, and enough exercise to sustain life and ensure the ability to perform physical and mental tasks.

Social health involves using food as a reason to gather together, carry out traditions, and socialize with family members. It also involves concerns about economic, moral, and political consequences of food-related choices and actions for oneself and others.

Emotional health refers to conscious reflection about the emotional attachments associated with food so that actions are based on reasoned thought, not simply implicit, unexamined feelings and attitudes.

Conceptual development refers to increasing responsibility regarding the consequences of food-related actions and increasing complexity in processing information about food.

In the more complex position, people are less susceptible to unnecessary pressures from outside influences. This gives them more flexibility in making everyday choices. As individual family members gain greater self-control and become more proactive in addressing food-related concerns, they ultimately gain more freedom or personal power. Likewise, as families take reasoned, collective action to change food-related policies and programs, they gain power as a family.

Reasons to Support the Position

First, taking this position involves a deliberate attempt to educate oneself and others. Insights developed contribute to a deeper and broader understanding of one's own beliefs as well as those of others. Also, by cooperating and joining together with others for collective action, individuals and families build a sense of community and are more likely to bring about needed social and political changes and reconstruction. Finally, personal, everyday concerns are seen in a broader, more futuristic way. Individuals and families see how situations in their lives are part of societal concerns. Taken together, such efforts can contribute to a sense of meaning and purpose in life.

Consequences to Oneself and Others

Ultimately, one consequence of the more complex pattern of thinking and acting would be a greater sense of control, power, and freedom, even though change might be slow at first and appear insignificant. Another probable consequence is the development of reflective individuals and family members who consider the consequences of personal actions on all parties directly or indirectly involved in the situation. However, consistently acting in accordance with this position might be costly in terms of the time, energy, and other resources. It will involve taking some risks in personal and social life and a continuing commitment to learning and self-development. Because of the high demands in this position, it is important to set priorities and focus efforts on a few broad concerns that affect the quality of everyone's family life. Few people have the individual resources to focus on every issue or concern. However, by working together through the votes cast in the marketplace and the voting booth, through social action groups, and through work for organizations devoted to specific issues, it is possible to shape the future.

Proactive Families

Families that are more deliberate in examining and selecting goals tend to be proactive. Proaction begins with education. This involves questioning the consequences of the current state of affairs and exposing family members to new learning situations that help them discover the limits of their knowledge.

According to Frances Lappé and Joseph Collins of the Institute for Food Development Policy, "Acting out of ignorance can strengthen the very forces that we must counter" (1978, p. 492). Insight comes when families deliberately uncover and critically examine myths about food and act in self-determining ways.

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But education of oneself and others is not enough. A second part of proaction is working cooperatively toward common goals. Furthermore, it is only through contact with others that change is possible. Lappé and Collins expand on this idea by stating, "Not only do we need others for the ongoing challenge that they represent, but for their help in our self-questioning in order to sharpen our unique contributions. We also must have the support of others when our risk-taking results in disappointments, as it inevitably will at times" (1978, p. 505).

A third part of proaction includes initiative and self-discipline in seeking and making use of educational opportunities, monitoring one's learning, and making changes in one's life based on conscious choices. The development of initiative and self-discipline in thinking will help eliminate social constraints that get in the way of accomplishing family goals.

In proactive families, practical reasoning provides a framework for examining significant food-related concerns. Practical reasoning is a complex thinking process for determining what to believe and do (Reid, 1979). An inherent part of this process is defining the continuing concerns of the family. Deciding what to do requires a complex line of reasoning using information about ends, context, means, and consequences.

Identifying Continuing Concerns of the Family

Individuals and families subjectively experience continuing concerns in a number of different ways ranging from feeling overwhelmed and powerless to feeling a sense of adventure, awe, or joy; from being puzzled, confused, or dissatisfied to feeling an *aha* experience of recognizing patterns and themes. As they become aware of these cues, individuals and families use discrepancy analysis to identify the continuing concerns in everyday life. Discrepancy analysis compares the current state of affairs with the state of affairs considered desirable (Strom, 1988). Two types of questions emerge in this process: social questions and intellectual questions. The two types of questions often overlap. Social questions are not completely separate from intellectual questions.

Social Questions

Social questions are addressed by taking into account the consequences of actions on all affected people and evaluating beliefs and practices to find the most positive set of consequences. Two illustrations of social questions that emerge from discrepancy analysis follow.

Should People Promote a Plentiful Food Source Despite the Environmental Consequences?

Increasing attention is being given to technological advances in farming practices and food processes so that individuals, families, and societies will have plentiful food. In one respect, these innovations represent a major advance in efficiently providing adequate, healthy food. However, careful analysis of the situation indicates a need for concern as well.

For example, Gussow and Clancy (1986) emphasize that the present food system has not been a success since some conventional farming practices and many food processes waste resources and nutrients and have a negative impact on the resource base of the world. Farming practices, such as the use of chemical fertilizers, herbicides, pesticides, multiple cropping, and irrigation, may affect the environment and create conditions that require technological responses. This strains soils, water supplies, flora, and fauna and contributes to energy shortages (Bryant, et al., 1985).

The food processing industry is an energy intensive system. Gussow and Clancy (1986) note that foods, after harvest, are subjected to a variety of processes. For every calorie that comes to the table, ten calories already have been expended. Every component of the food system requires nonrenewable fossil fuels. In spite of this, most consumers appreciate the extended shelf life of food and the aesthetically pleasing foods produced by the food industry. Other benefits are the convenience, variety, and economy of packaged foods.

According to Dana Ott of Michigan State University (1988), most food product choices would not be available if it were not for plastic packaging. Although plastic materials are cheaper for producers, there are drawbacks to using these materials. Currently, 30 percent of municipal solid waste in landfills consists of inorganics and plastics that are not biodegradable (Ott, 1988). Over-extended landfills are just one more piece of evidence that food packaged in nonbiodegradable substances such as plastic has negative ecological consequences. However, even biodegradable plastics present problems. According to Kenneth Marsh, biodegradation is only a minor benefit in landfills because "the presence of biodegradable plastics will interfere with recycling efforts, and may form undesirable breakdown products" (1991).

Should Food Be Used to Control Others?

The use of food to manipulate and control others occurs on many levels, beginning with families and continuing on into struggles among groups within societies and between nations. At the family level, food can be used as a means of power between parent and child as well as between adult members of a family (Satter, 1987). At times, parents reward their children's good behavior with food (such as candy) or withhold certain foods for behavior considered inappropriate (such as not allowing a child to eat dessert). At the same time, parents or other adult members in the family might use food to manipulate and control one another's behavior. The cliché, "The best way to a man's heart is through his stomach," is but one example.

At the societal level, food is power and control among groups. Those in authority frequently make decisions about food assistance programs without considering the hopelessness and despair that accompany hunger. Hopelessness and despair might continue or increase even when the government provides economic assistance.

The American Dietetic Association defines hunger as "the condition of consuming inadequate amounts of food and nutrients to sustain physical health and mental well-being" (Foerster and Hinton, 1987). However, the problem with hunger goes beyond the need for food. The root cause of hunger is often poverty. Marion Nestle and Sally Guttmacher, professors at New York University, write that "Hunger is inextricably linked to poverty, which in turn is inextricably linked to underemployment and the costs of

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hunger goes beyond
the need for food.*

housing and other basic needs" (1992). Decisions that establish the poverty line, set criteria used in evaluating the extent of poverty, and identify people in need of federal assistance have many ramifications. For example, federal programs such as the Food Stamp Program, School Nutrition Programs, and Commodity Food Distribution are available to those who qualify based on the poverty line. This decision, however, is frequently made with limited input from those who work with people at or near the poverty line or from the people themselves. The poverty line, for which the standard (the cost of an Economy Food Plan multiplied by three) was established in 1955, does not take into account the increase in the costs of living, particularly housing costs, and the decreased proportion of income typically spent on food (Clancy and Bowering, 1992). Such practices reduce people's sense of control over significant choices in life and often lead to feelings of powerlessness and frustration.

Food is also used as a means of power and control among nations. Vast supplies of food given as aid often rot in storage, leaving people hungry. There is much controversy about the United States' involvement in the food policies and practices of other countries. For example, some people see food aid as a tool for eliminating hunger in the world. Others feel that food aid is a short-term answer. According to Jack Nelson (1980), national coordinator of the Politics of Food Program with Clergy and Laity Concerned, such programs might effectively discourage food production in poor countries and foster dependency. Elaine Murphy, of the U.S. Agency for International Development, reinforces this view but indicates that some aid is necessary. Murphy argues that "emphasis must be placed on aid that helps these nations become self-sufficient through investments in agriculture improvement and/or other sectors that improve the overall economy and, therefore, purchasing power" (1985).

Lappé and Collins express strong sentiments against the practice of foreign aid, arguing, "Foreign aid only reinforces what is there. It cannot transform an antidemocratic process working against the majority into a participatory government shaped in its interests" (1986, p. 113).

Hunger and malnutrition are closely tied to political factors. There are no quick-fixes. Foreign aid programs, population control, and even increased food production are not sufficient responses to this complex problem. Gerald Trant, Executive Director of the United Nations World Food Council, states that "Ensuring food security for a family on a permanent basis requires that income or resources are available for that family to buy or grow its own food. Countries wishing to eliminate poverty, hunger, and malnutrition will have to establish their own programs to do so" (1993).

Intellectual Questions

Another major area of concern when comparing the current state of affairs with the state of affairs considered desirable is that many people do not use their intellectual capacity to address and solve food-related concerns of the family. Instead, they let others make decisions for them. Two illustrations of intellectual questions that emerge from discrepancy analysis are included below.

What Should the Family Do About Food-Related Information?

With more scientific information about food available, people are bombarded with media messages about food. This information changes all the time and frequently conflicts. Some individuals and families have a difficult time believing that certain foods and eating patterns are harmful when food labels and advertisements suggest otherwise. Furthermore, disagreements about this information have emerged among different interest groups, for example, the scientific community, public health organizations, government regulatory agencies, food producers and marketers, and consumer advocate groups (Glanz, et al., 1989). As a result, many individuals and families are confused about what to believe and do. They wonder what food-related information really means and what dietary practices actually enhance health.

Food-related advertising and self-proclaimed food experts also convey misinformation. As Jean Mayer, former president of Tufts University, states, "Few other subject areas are surrounded by as much misinformation as is nutrition. Books and articles on diet and nutrition written by uninformed laymen or outright quacks far outnumber those written by informed professional writers or by authorities in nutrition" (1982).

Misrepresentations of scientific information, fallacious reasoning, and outright deceptions have led individuals and families to believe that some practices are a normal part of life (such as eating food supplements, fasting in order to lose weight, or eating gourmet foods). Testimonials from some celebrities who suggest that these practices are in the best interests of all perpetuate such distortions. In reality, only a few people and corporations profit from these practices. Similarly, some businesses profit at both ends. For instance, some businesses promote foods with empty calories and also sell diet foods to help people lose the weight they have gained from eating junk food.

...information changes all the time and frequently conflicts.

What Should the Family Do About Changing Food Norms?

At one time, well-defined standards and expectations for food-related attitudes and behavior prevailed. Individuals and families relied on traditions, regional customs, and even employment patterns for establishing consumption and procurement patterns. For instance, at one time the accepted eating pattern was for families to eat the majority of their meals together in their home with the females of the household doing most of the preparation, serving, and clean-up. Even though some people still refer to this eating pattern as a norm, most U.S. families do not practice it on a regular basis.

Using the idea of "kaleidoscopic transmutations" as an analogy (Kitzinger, 1980) is one way to show contemporary food norms. When looking into a kaleidoscope, one sees thousands of mutations of a pattern. These changes occur in small increments. Each picture is difficult to define and isolate. Similarly, food norms change constantly in ways that are difficult to identify and explain. Thinking in a deliberate and conscious way about these changing food norms is no easier than thinking about each mutation seen in a kaleidoscope.

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Once the kaleidoscope is rotated, it is impossible to go back to view the same design again. Trying to hold onto old norms is similar to finding the same design in the kaleidoscope twice. Going back to old food practices is highly unlikely. The context of life changes constantly, leading to new beliefs and actions.

A person who is not in control of the twists and turns that make the pictures is likely to express feelings of powerlessness and frustration. Likewise, individuals and families experience similar feelings when food norms are controlled. Individuals and families frequently give up choices and may not even try to think through the consequences of each change in food norms proposed by these external forces.

Thus, the feelings people have when looking at a kaleidoscope are much like those presented with the changing nature of food norms. Excitement, confusion, and fascination are just some of the emotions that predominate and conflict. In the midst of this, there is little time to use one's intellectual capacity to think about each change in a deliberate, conscious manner.

Summary

*...individuals and
families must give
attention to the
ethical implications
of their food-related
judgments and
actions.*

The family has important work to do considering the potential consequences of the differences between the current and desired state of affairs regarding food. Families should talk about food-related concerns and develop intellectual capacities to address and solve those concerns. Proaction is a positive outgrowth of this education process. Proactive people are more likely to use critical thinking skills to consider the ethical implication of their choices and actions on others and to use this information in deciding what to do. Proaction becomes increasingly important as individuals and families develop greater degrees of freedom and responsibility in their lives.

Because food choices have the possibility of both positive and negative outcomes, individuals and families must give attention to the ethical implications of their food-related judgments and actions. At an individual level, the principles of fairness, justice, equality, and freedom are more likely to lead to increased self-worth and the preservation of human dignity. Application of these principles within the family will enhance each family's ability to confront and solve significant continuing concerns regarding food. At the societal level, as the family becomes a more democratic social institution, the likelihood of accomplishing the work of the family in promoting self-formation and societal development increases.

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Course Description

3

Introduction
Assumptions About Curriculum
Course Learning Goals
Conceptual Framework
How to Use the Modules
Summary
References

Introduction

This chapter outlines Family, Food, and Society, a food-related course of study to be offered at the high school level as part of a comprehensive family and consumer education program. The chapter contains information about course assumptions, learning goals, the conceptual framework of the course, and a summary of the individual modules and how to use the them.

Assumptions About Curriculum

*Understanding
underlying
assumptions is
essential to
knowledgeable use
of course materials.*

Any approach to curriculum makes certain assumptions. These assumptions concern beliefs about the nature of society and the learner, the teaching-learning process, and the function of knowledge and subject matter. Sometimes assumptions are implicit and unrecognized by curriculum developers and users. In rational approaches to curriculum, however, it is necessary to make assumptions explicit and use them deliberately in designing course materials. Understanding underlying assumptions is essential to knowledgeable use of course materials. The following are underlying assumptions of the Family, Food, and Society course.

Concerning Society

Democratic societies depend on the active participation of mature citizens. Members affect and are affected by social conditions and standards in society. Individuals create and can, through joint effort, improve social conditions and standards, for example in the family, at work, through purchases in the marketplace, and by voting and actively participating in community life. As a primary social institution, the family has important work to do by contributing to the development of members who are capable of intelligent and socially responsible action, and by contributing intellectually and ethically to the creation and protection of a free democratic society.

Concerning the Learner

*Learners come to
formal instructional
settings with prior
knowledge.*

Learners assume an active role in managing, monitoring, and evaluating their own learning. Learners consciously organize and use what they know to address and solve questions about what to believe and do, seek new knowledge, and advance their own development. Learning and development occur informally as a part of everyday life, through self-directed study, and through instruction. But the results of those processes vary depending on the quality of support and challenge available in families, schools, workplaces, and communities. Learners come to formal instructional settings with prior knowledge. These existing attitudes, interests, perceptions, beliefs, skills, and experiences may help or hinder the teaching-learning process.

Concerning the Teaching-Learning Process

The teaching-learning process focuses on the students' development of conceptual complexity and social responsibility. The teacher, as facilitator, helps create the cognitive and social conditions that support meaningful learning. The process of teaching and learning emphasizes four major ideas: inquiry, including guided rediscovery of existing knowledge; communication oriented toward reaching mutual understanding about meanings and collective action; the creation and reorganization of knowledge to address significant questions and solve everyday problems; and equity, by respecting diversity and providing all students opportunity to develop knowledge, attitudes, and skills, including those needed to sustain self-directed, lifelong learning. The student and teacher are co-investigators; the actual curriculum emerges from the interaction of the students, teachers, and materials.

Concerning Content

Subject matter, intellectual processes, and social skills are treated as content. A student's conceptual development requires that the content of the learning experiences be identified. Otherwise, assisting students with differentiation and integration of concepts cannot occur. However, content is not intended as subject matter to be dished out for student mastery. Rather, knowledge is created socially through guided inquiry (Schwartz and Perkins, 1989; Costa and Liebmann, 1995). Conceptual content is drawn from theory and research in several relevant disciplines and reorganized to address the questions being considered.

Course Learning Goals

The Family, Food, and Society course of study supports Wisconsin's mission for family and consumer education programs: to give students opportunities to gain competence in the work of the family. The overall aim of the Family, Food, and Society course is to assist adolescents in developing reasoned ways to think about food-related beliefs and practices. The course focuses on significant continuing concerns of the family regarding food. These concerns arise from discrepancies between the state of affairs the family considers desirable and the state of affairs that currently enables or prevents the family from achieving its goals. Using this approach, students learn understanding and skills needed to accomplish family goals. By the end of the course, students should be able to:

- identify continuing concerns of the family.
- use practical reasoning, cooperative dialogue, and critical thinking skills to address continuing concerns of the family.
- take reasoned action to solve continuing concerns of the family.
- examine self-defeating patterns of thinking and acting.
- accept the value of reflective action in assessing personal learning.
- assume responsibility as a family member and citizen.
- actively use food-related concepts.

These learning goals are consistent with Wisconsin's Educational Goals and Learner Outcomes, which are listed in appendix B.

The Family, Food, and Society course of study supports Wisconsin's mission for family and consumer education programs: to give students opportunities to gain competence in the work of the family.

Conceptual Framework

The body of the guide consists of five modules, which provide a prototype of a family-focus course about food. As one of the core concepts in the emerging family-focus approach, practical reasoning provides the conceptual framework for the Family, Food, and Society course prototype. It was used to generate curriculum content; connect representative subject matter concepts, intellectual processes and social skills; and link teaching-learning modules together. Practical reasoning is a skilled intellectual and social process of inquiry used in addressing and answering practical questions in everyday life (Reid, 1979). Appendix C provides some theoretical background to the practical reasoning process.

The structure of the course is outlined below. Each part of the guide is interdependent with the other parts. The guide is best used as a whole. Because there will be individual differences in student background and experience, it might be necessary to spend more time developing some concepts than others.

Broad Continuing Concern of the Course: What ought to be done about food for the family in society?

Module A

Subconcern I: Why should people be concerned about food, its meaning, and ways of obtaining and using it?

Module Description

Module A introduces the broad continuing concern of the family about food. It is a brief introductory unit to give students an overview of the course and to create interest in studying food-related attitudes and practices in families and societies. Initially, students engage in activities designed to demonstrate feelings of powerlessness. As the module unfolds, students experience feelings of empowerment. This helps them understand the complexities of food-related concerns and that individuals and families can take deliberate, reasoned action when making food-related judgments.

Course Questions

- Why is it important to study food-related beliefs and practices in families and society?
- What are the significant continuing concerns about food facing individuals and families?
- What should the role of the family be with respect to food?

Category of practical reasoning emphasized: determining continuing concerns of the family

Broad concept emphasized: significant continuing concerns of the family

Intellectual and social skills emphasized: perspective taking and discrepancy analysis

*Module A
introduces the
broad continuing
concern of the
family about food.*

Module B

Subconcern II: What should families do regarding the development of food attitudes and norms?

Module Description

This module addresses the development of food-related attitudes and norms and their significance to individuals and families. Emphasis is placed on the family's role in the development of food attitudes and norms and their consequences to the family and society. Concept analysis and interpretation of context are two intellectual and social skills that are used in clarifying and examining meanings attached to food attitudes and norms.

This module addresses the development of food-related attitudes and norms....

Course Questions

- What are food attitudes and norms?
- How does context affect existing food attitudes?
- How are food attitudes developed?
- How do families use contextual information to determine which food attitudes are desirable?

Category of practical reasoning emphasized: interpreting information about the context of the continuing concern of the family

Broad concepts emphasized: food attitudes and food norms

Intellectual and social skills emphasized: using concept analysis, interpreting aspects of context, and developing personal perspectives

Module C

Subconcern III: What should families and society do about food consumption patterns?

Module Description

Module C focuses on patterns of food consumption and the consequences changing food-related practices have had on individuals, families, and societies. Students analyze sources of information that affect food consumption decisions for accuracy, bias, and contradictions. The development of critical awareness skills is emphasized so that students can examine discrepancies between current food consumption patterns and those considered desirable.

Module C focuses on patterns of food consumption and the consequences changing food-related practices have had on individuals, families, and societies.

Course Questions

- Why should families be concerned about current patterns of food consumption?
- What aspects of context influence patterns of food consumption?
- What intellectual and social skills can families use in addressing their concerns about consumption?

Category of practical reasoning emphasized: evaluating consequences

Broad concepts emphasized: reliable information, discrepancies, and consequences

*Students explore
alternative means
of getting food....*

Intellectual and social skills emphasized: developing critical awareness of the personal and social skills needed to do the work of the family, the factors that limit or prevent the pursuit of food-related family goals, and the consequences of different patterns of thinking and acting.

Module D

Subconcern IV: What ought to be done about getting food?

Module Description

Module D studies the ways individuals, families, and societies obtain food. This is of concern because individuals and families have different valued ends and function within a variety of contexts. Students explore alternative means of getting food and examine the consequences of acting interdependently. The module focuses on the intellectual and social skills involved in making reasoned judgments about valued ends.

Course Questions

- Why be concerned about the way people get food?
- What factors and conditions influence families' and societies' ability to pursue food-related valued ends?
- How do proactive individuals and families determine the best way to obtain, store, and use food?

Category of practical reasoning emphasized: considering valued ends, alternative means, and consequences

Broad concepts emphasized: interdependence and safe food supply

Intellectual and social skills emphasized: reasoning about valued ends

Module E

Subconcern V: What action should individuals, families, and society take in regard to food-related concerns?

Module Description

In module E students integrate conceptual knowledge and intellectual and social skills from the four previous modules. This is done to develop and carry out a family or community action project based on the practical reasoning process. Module E serves as the culmination of the entire course.

Course Questions

- What kind of reasoning is involved in determining what to do about food?
- What types of action can or should individuals and families take to solve concerns about food?
- What should individuals and families do about taking deliberate, reasoned action regarding food?

Category of practical reasoning emphasized: reflective judgment and deliberate action

Broad concept emphasized: reasoned action

Intellectual and social skill emphasized: practical reasoning and cooperative dialogue

*In Module E
students ...develop
and carry out a
family or
community action
project....*

Each module builds on content from previous modules by revisiting subject matter, concepts, and intellectual and social skill processes. Additionally, the guide moves from an individual perspective to a more global perspective.

How to Use the Modules

Each module consists of a curriculum outline of teaching-learning experiences, including conceptual statements, directed activities, and support materials that are designed to reflect the family-focus approach. Psychological principles of learning have been applied in organizing the conceptual material and directed activities to increase the effectiveness of instruction. Learning experiences in the modules are organized using different patterns of ideas and directed activities to accommodate individual differences in learning needs and talents. For example, the different approaches include:

- employing inductive or deductive activity sequences,
- moving from simple ideas to greater complexity and integration of ideas,
- starting with an impersonal focus and moving to integrate with personal experience, or vice versa, and,
- making familiar ideas and experiences strange and the strange familiar.

By addressing individual differences in learning needs, students are more likely to take responsibility for their own learning, to grasp large concepts and connecting ideas that spiral through the modules, and to link new experiences with previous learning and everyday life (American Psychological Association, 1993).

Conceptual statements—are an integrated outline of major subject matter concepts, intellectual processes, and social skills appearing in the left column parallel to related directed activities. Changes in print style and print size indicate various levels of the outline and how concepts relate to one another. Teachers will use conceptual statements to develop their understanding of the content of the directed activities. These statements are organized to tell a story about the understandings and skills related to the subconcern under consideration in the module. They address the course questions identified for each module on pages 32 through 34. Appendix D contains the conceptual statements on their own to show the conceptual outline of the guide in its entirety.

The challenge in teaching is to actively engage students with powerful curriculum content that exemplifies the representative ideas and modes of inquiry in the field. Using the content and structure of the field as a guide, Family, Food, and Society is organized around significant integrative questions of continuing concern to the family and society about food and the kinds of thinking and acting needed to address these questions in everyday practical problem solving.

Although the conceptual statements represent the content of the learning activities, they are not intended as subject matter for student mastery. Knowledge is created socially through guided inquiry. Therefore, students will express their conceptual understanding of the directed activities in their own language.

Therefore, students will express their conceptual understanding of the directed activities in their own language.

Directed activities—appear in the right-hand column. Each new directed activity is introduced by a descriptive title in bold and a statement about the purpose of the directed activity, followed by a description of the activity that teachers and students will go through in that phase of the teaching-learning process. Individual differences in learning needs are addressed by varying the cognitive, social, motivational, and sensory elements of the teaching-learning environment (Armstrong, 1994). Discussion questions to encourage critical thinking and dialogue are included as appropriate.

To encourage meaningful learning, teachers need to formulate a clear idea about

- what students are expected to learn and why,
- how they are expected to learn this,
- what materials and resources need to be available,
- how to help students see patterns and make connections, and
- how to find out whether or not students are making progress.

Before initiating a directed activity, teachers should ask themselves, Have I laid the necessary groundwork so that students can participate effectively in this activity and apply what they have learned?

Notes to teacher—occur as separate paragraphs in the directed activities column, starting with a bold symbol ► followed by Teacher note:. The note contains suggestions to the teacher about setting up directed activities, reminders about revisiting concepts, ways to help students connect what they know with new information and experiences, or transitions where diagnostic, formative or summative student assessment opportunities make sense.

Support materials—are referred to in the directed activities section with a bold symbol, capital letter, dot, and number, for example ■ A.1. This code corresponds to teacher or student references contained in the support material section that follows each module. This section addresses the question, What support is needed in order to create the learning environment specified in the directed activities? The support materials are intended to supplement the directed activities, providing directions for using the teaching-learning strategy, explanations of specific techniques or procedures involved, descriptions of ways to adapt the strategy to fit different contexts, and suggestions for enriching and extending learning.

The selections in the support materials are not endorsements of particular points of view. Support materials are suggested as examples and often are intended as a means to raise controversial issues. Teachers should consider community norms when selecting materials to supplement the directed activities. Teachers are encouraged to ask students to bring in articles representing different points of view. Appendix E offers suggestions on how to teach controversial issues.

Teacher references—are background materials designed for teacher use, such as articles that provide further information about the ideas being considered, procedures to use, student project ideas, ways to assist students with integrative thinking and learning, and devices that encourage students to check their own progress in learning.

Student references—are supplementary materials for student use in individual or small group investigation and dialogue. Included are specific handouts—articles, cartoons, case studies, discussion formats, games and simulations, laboratory sheets, plays, poetry, questionnaires, short stories—and the directions for using them. Many of the articles are provided as examples, and teachers may want to substitute current articles that have more immediate relevance.

References—are citations for material credited to other authors and publishers and are noted in the specific teacher or student reference or listed in full at the end of the support material section for each module. Listings of published materials that provide background and more detailed explanations of specific teaching-learning strategies appear in appendix A, Further Reading.

Summary

Family, Food, and Society: A Teachers' Guide offers students numerous learning opportunities. Students who complete this course will be better able to address food-related concerns of the family that they encounter in everyday life. Students will understand the way these concerns are addressed and solved, and how the approach used has an impact at the individual, family, and societal levels. The course has the potential to extend students' intellectual and social skills. Perspective taking, analysis of concepts, interpretation of context, and development of critical awareness are explicitly built into the teaching and learning experiences. Students engage in activities and projects that require conscious reasoning about context, valued ends, means, and consequences in making judgments about what to do.

References

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▼ *Throughout history, food has been a concern of individuals, families, and societies.*

This first module introduces students to food-related attitudes and practices in families and societies. The activities initially create a feeling of powerlessness, but gradually move to empowerment. By the end of this first module, students should possess the understanding that food-related concerns are not simple and that the complexity of choices is best dealt with by reasoned judgments.

The scavenger hunt illustrates how food has been a concern for all kinds of people in different cultures over time. Use support material ■ A.1 on page 48 as a basis for this activity. After completing this activity, students should look at all of the matches. Have them discuss similarities and differences in the food-related concerns of individuals, families, and societies using the following questions:

- In what ways are these persons and concerns similar?
- In what ways are they different?

Ask students to continue working with their partner to answer the following questions regarding the matches.

- Why are the matches similar?
- Why do they differ?
- What do these matches represent?
- What does this tell us about food?

► **Teacher note:** It is important to ask questions that encourage students to analyze and use their comparisons in developing a broader picture of food-related concerns. Merely listing similarities and differences has little value in itself without further discussion.

Food timeline. To take a closer look at how food has been a concern over time, students should create a timeline that represents foods commonly eaten by people at various times in history. Support material ■ A.2 provides further instructions for creating a timeline. Encourage discussion throughout this activity by asking students to share what they know about any of the foods.

After students have arranged all the foods on the timeline, hand out the article "American Eats" (see support material ■ A.3). Students should read the article to check the accuracy of their timeline and rearrange foods if necessary. After the activity, have students write answers to questions at the end of support material ■ A.3.

Through class discussion, use the following questions to help students integrate understandings developed in their individual or small group analyses and comparisons.

- Why have foods changed over time?
- What factors contribute to the development of new foods?
- What effects have new food developments had on individuals, families, and societies?
- How does this information help people to think about and understand food?

Conceptual Statements

A continuing concern of family is something that recurs over time, is experienced by all people, and may have positive or negative aspects.

Directed Activities

Develop the meaning of *concern* using the following activities. Help students understand how the word *concern* applies to food. Begin by developing a working definition of *concern* by having students verbalize their definition of *concern* and listing all the ideas on newsprint.

► **Teacher note:** Make sure to list everyone's ideas on the newsprint with the understanding that no right or wrong answer exists. This will create a safe classroom environment in which students feel comfortable articulating their thoughts.

Use probing questions to encourage students to clarify their ideas and think more deeply about their definitions. Ask, Why do you think that is so? or say, Give an example to show what you mean.

Next have students work in small groups to further develop their conceptual understanding of the word *concern*. Ask them to list some everyday concerns in their lives and then have them indicate what is common to all their concerns. Then students should share their ideas with the large group. As each small group shares its ideas, list the ideas on newsprint. Have students resume working in small groups to answer the following questions:

- People from different times had similar concerns because concerns recur over time. How does this idea relate to one of your concerns?
- Concerns can be either positive or negative. What are some examples of positive and negative concerns?
- A concern is experienced by different kinds of people. How does this idea relate to one of your concerns?
- Based on what you have learned about a concern, why might food be a concern of all people?

As a class, or in small groups, ask students to think of examples of food-related concerns and list them on a separate piece of newsprint. Encourage students to continue to think of and add food-related concerns to the list over the next few days. They might develop a bulletin board using pictures to illustrate these concerns. Ask each student to find a picture and explain why he or she is including it in the display.

► **Teacher note:** To use a concept appropriately, students must supply clear and obvious examples of the concept or examples in which the concept applies. Keep this in mind when assessing whether all students have a clear understanding of the meaning of *concern*. Be prepared to supply examples and nonexamples if the students have difficulty with this task. This activity introduces the concept *continuing concerns*. The second part of this module will revisit this concept, at which time more probing questions can be asked.

Conceptual Statements

Food has been a concern of people over time because it satisfies basic human needs.

- *People need food for physical growth and development.*
- *Individuals and families use food to meet other basic needs for security, acceptance, self-worth, and self-fulfillment.*

Individuals and families associate multiple meanings with food, thereby creating other concerns. People attach the following kinds of meanings to food:

- *Physical meanings include health, energy, and strength.*
- *Social meanings are attached to food when food is coupled with relationships, status, unity, identity, celebration, power, and control.*
- *Emotional meanings involve feelings that are experienced in relation to certain foods.*

Food is a continuing concern because the tasks involved in obtaining and using food are complex and occur on a daily basis.

Directed Activities

The perfect food. In this lab activity, students will select or invent a food that they consider to be perfect. See support materials ■ A.4 and ■ A.5 for directions. After preparing and then presenting their food to the class, the students will analyze the reasoning that led to their selection. This will help students understand the ways in which food meets basic needs.

The need pyramid. Continue developing a deeper understanding of how food meets basic human needs by examining a large illustration or transparency of the need pyramid in support material ■ A.6. Ask students to give examples of how people meet these basic human needs in everyday life. Next, have them consider which need their perfect food satisfies. Continue questioning to develop a deeper understanding of how food satisfies basic physical, social, and emotional needs using the following questions:

- Could the same food fulfill each basic need represented in the hierarchy? If so, explain how and when. Give other examples of foods that satisfy each of these needs.
- Which needs do your favorite foods satisfy?
- What does this tell us about how people use food? What does this tell us about ourselves?

Food stories. Ask students to bring a short story, poem, song, cartoon, or picture that relates to food. Ask students to share what they bring with the class and explain how food is being used to fulfill one or more basic needs.

Meanings of food. Not only do people select food to meet certain basic needs, they also attach meanings to food and food-related practices. The additional meanings of food and food-related practices may be unconscious and unreasoned. This food activity is intended to help students think about some consequences of attaching meanings to foods. See support material ■ A.7 for directions.

After the students have completed the meanings of food activity, ask them the following questions to help them predict probable consequences of attaching certain meanings to foods. Students may answer the questions in small groups or together as a class.

- What might happen if we attached untrue or unrealistic physical meanings to food?
- What might happen if different people attach different social meanings to food?
- What might happen when emotional meanings are attached to foods?
- What concerns arise about attaching meanings to food for individuals? For families? For society?

Complex and daily, the maze activity, is designed to help students think about how food-related tasks are complex and recognize the personal and societal conditions that contribute to the complexity of these tasks. Before considering how food involves complex, daily tasks, check students' understanding of the words *complex* and

Directed Activities

daily. Ask students to write two sentences using the words *complex* and *daily*. After they give examples of sentences, discuss what people mean when they use each of these words. Discuss when these words might be used in regard to food. Then ask students to examine the complexities of getting and using food on a daily basis by completing support material ■ A.8.

- Build on the analogy in the maze activity. First ask the students how considering available options is like encountering dead ends in a maze. For example, teenagers may have money to purchase food from either a vending machine or the school lunch program, but they are still faced with limited choices because someone else has decided what food to provide for them. What does this example say about the complexities of getting and using food on a daily basis? Generate additional examples to help students grasp how certain personal and social processes, conditions, and events can prevent families from accomplishing food-related goals. As a class, develop a list of reasons why people might have difficulty getting and using food on a daily basis.**

Newspaper story. Use a newspaper story on getting and using food to identify additional factors that make obtaining and using food on a daily basis complex. After reading the story, the students should answer this question: What does this story illustrate about the complexity of getting and using food on a daily basis?

An example of a story that teachers can use is included in support material **A.9**. Teachers might ask students to bring in their own newspaper stories that relate to the complexity of getting and using food.

► **Teacher note:** Encourage students to bring in stories throughout the course and use these at appropriate times. Suggest that students look for stories about other cultures or cultural groups as well.

The unplanned lab is intentionally structured to create conditions that make preparation of food difficult for each group. The conditions will vary from group to group. Support materials ■ A.10 and ■ A.11 provide recipes and directions.

On the day after the lab, change the seating chart. Begin by asking students to make connections between the way they feel about the new seating chart and their experiences in lab the previous day. What does it feel like to lack control over what happens? Next, have each group tell about their situation in lab the previous day. Share examples of concerns and examples of feeling powerless. Use support materials ■ **A.12** as a follow-up to help students think of food-related situations in real life that promote powerlessness. Have the students form small work groups and have each group complete support material ■ **A.12**. Share examples as a large group. Have students refer back to the work they did in the

- *As a result, food attitudes and practices might develop that have serious consequences for people. These practices may have harmful, nonreversible effects on human development, thereby limiting or preventing the accomplishment of family and societal goals.*

maze activity in support material ■ A.8 for a list of reasons why people might have difficulty getting and using food on a daily basis. Ask students what new ideas can be added to this list.

Current food-related attitudes and practices. Identifying these attitudes and practices will help students consider the consequences of different ways of thinking and behaving about food. At this point, develop a working definition of an *attitude* by asking students to think about getting graded on attitude in elementary school. What was being assessed? What is an attitude? (For example, an attitude is the way a person thinks about and reacts toward something. It may be positive or negative. A person may have an attitude toward school or toward food.)

Food pictures. Ask students to view pictures or slides about food to help them identify various food attitudes and practices. Locate pictures or slides that illustrate food attitudes and practices, such as food at a social gathering, food waste, people preparing food, a diet food, a status food, an assortment of food-related paper products, a person with carry-out food, a man having his blood pressure checked, a child being given a treat, or a group of people eating together at a table.

Tell students that they are to write one word or phrase that describes each picture. Next to that word they should indicate whether they feel positive (+), negative (-), or neutral (o) about the practice in the picture. After students have completed this, ask them to answer the following questions:

- Which picture did you feel the strongest about?
- What was your reaction to that picture?
- What are some factors that contribute to your reaction?
- What is one general statement you can make about food attitudes and practices?
- What do attitudes and practices have to do with the other ideas we have talked about in class?

Impact chart ■ A.13. Working in pairs, students select a food attitude or practice illustrated in one of the pictures and develop an impact chart to show the consequences of that attitude or practice. Afterward, the partners should summarize their impact chart by writing a scenario using the criteria listed. These scenarios can be dramatized for the large group. The chart and scenario can serve as a means of informal evaluation to check student understanding of the concepts.

Conceptual Statements

Families may use one of two strategies to address complex concerns.

- *They may oversimplify to the point that context and goals are ignored.*
- *They may use the intellectual and social process of perspective taking to address the complexity of food-related situations.*
 - ... *The process of taking another's point of view involves exploring how different people would view particular events, conditions, or elements of the situation.*
 - ... *It entails learning about that person's or group's beliefs, values, and feelings.*
 - ... *In this process, thinking moves back and forth between one's own ideas, feelings, and experiences and those of others.*

▼ Because there are so many food-related concerns, individuals and families need to learn the process of determining which questions are most significant.

Four significant food-related continuing concerns are the development of food attitudes, patterns of food consumption, obtaining food, and taking action in regard to food.

- *To determine significant continuing concerns, individuals and families must consider how specific concerns relate to larger, more general ones.*

Directed Activities

The Indian meal lab is intended to help students take a different perspective to address the complexity of food-related situations. See support material ■ A.14 for recipes to prepare an Indian meal.

After preparing and sampling the Indian foods, ask the students to respond to the following questions:

- How did you feel about this meal? Why?
- How do you think someone from India would feel about this meal? Why?
- Explain why individuals in different cultures would view this meal differently?
- What similarities might exist between how individuals from different cultures view this meal?
- How do you think a nutritionist might view this meal? A representative from the National Beef Council? A manufacturer of convenience foods?
- How does taking various perspectives add to the complexities of getting and using food?
- Why might it be helpful to consider different points of view regarding food?

Determining food-related concerns. Have students complete the grouping activity using the directions provided in support material ■ A.15. Post the four significant continuing concerns of the course, development of food attitudes and norms, patterns of food consumption, obtaining food, and taking action regarding food concerns, on the wall using newsprint. These four significant concerns are the subconcerns of modules B, C, D, and E listed in the conceptual framework of chapter 3. Discuss the connections between the students' grouping labels and the four significant concerns. This activity expands upon the activities about concerns the students completed earlier in the module. At this point, assist the students in expanding their definition of *concern* to *continuing concern*. Have students work in groups to generate two to three questions about each continuing concern. List these on the newsprint.

Defining significance. To help students understand why these concerns are considered significant, examine the meaning of *significance* using the following activities. Begin by having students think about personal meanings of *significant questions*.

- A significant continuing concern
 - ... recurs over time.
 - ... has multiple, far-reaching effects or consequences (for example, if action is likely to affect human or societal development or if existing conditions are degrading, cause unnecessary human suffering, or interfere with accomplishing goals).
 - ... requires choice between ideals or values.
 - ... is amenable to change so action can be taken.

- Continuing concerns grow out of discrepancies between what currently exists and the needs, wants, and goals of people who are involved in the situation.

- What are some significant events in your life (getting a driver's license, getting a job, turning eighteen)?
- What are some significant family events?
- What are some significant events in the United States?

Next, to build on these ideas, read "The Ant," (support material ■ A.16) and ask students to respond to the questions at the end of the story.

Human figure on garbage pit. To help students identify questions of significance related to food, show a transparency of the cartoon in support material ■ A.17. Ask students what current food-related concerns this cartoon represents. Ask students to phrase the concerns as questions, for example: What ought to be done about food waste? What makes this a significant question? List the characteristics of significant questions generated from the discussion on the board.

Ask students probing questions to help identify the characteristics of significant food-related questions. Questions such as the following will help stimulate discussion and encourage students to clarify their thinking:

- Who has to deal with this question?
- Why do we have this question now?
- Have we always had it?
- What can you say about the consequences of this concern?
- What needs to be done about this concern?
- If this question is significant, what is an example of one that is not? What makes you say that?

Food-related cartoons. Have students bring cartoons to class. Working in small groups, students can complete support material ■ A.18 using cartoons to identify additional significant questions about a current food situation, possible consequences, and actions people might take regarding this concern.

Bridge analogy. Finally, working as a class, develop a list of food ideals asking, What do you want regarding food? and, What do you think should exist regarding food? Then ask students, How is answering the significant concerns of families like building a bridge? Use the analogy of a bridge to give a concrete representation of discrepancies or gaps. Explain to students how discrepancies or gaps exist when there is a difference between what currently exists and what people want or believe should exist. The bridge represents what it takes to move from the present situation to what should exist. What does it, or will it, take to move from what currently exists to what should exist?

Conceptual Statements

▼ ***The role of individuals and families in regard to these food-related continuing concerns is to take reasoned action.***

Learning and using intellectual and social processes will assist individuals and families in taking reasoned action.

- *Some patterns of thinking and acting hinder while others promote learning about food.*
- *Creative and critical thinking help families address and solve food-related concerns.*
- *Patterns of thinking and acting are often learned in the family, beginning in early years, and should be continually examined for appropriateness and reasonableness.*

Gaining a sense of control over one's thought processes and actions is necessary in order to take reasoned action.

Directed Activities

Mind-stretching puzzles. The following activity can illustrate how new ways of thinking about food will promote learning about food-related concerns. Have students solve mind-stretching puzzles and answer the accompanying questions included in support material ■ A.19. Use the questions below to summarize the intent of this activity:

- How do people learn ways of thinking?
- What are some ways of thinking that promote learning?
- What ways of thinking help us gain more control over our thoughts and actions regarding food-related concerns?

A trip to the grocery store. This activity will help to complete work in this module. Use support material ■ A.20 to help students experience a sense of powerlessness and a sense of power and control in regard to food. The story in the support material is written in two parts. The first part is fantasy and the second part is reality.

What I have learned. After completing the grocery store activity, ask students to use the self-assessment tool in support material ■ A.21. This will help teachers and students summarize what they learned about food throughout the module. Then, working in pairs, students are to write two paragraphs using the words: food, history, daily, complex, families. (The teacher can use this activity to assess student progress.)

The talk show in support material ■ A.22 is a way of summarizing some of the ideas in module A. Each module ends with a segment from the talk show. Use it to help students review the major concepts in the module, to provide a transition between modules, and to summarize and structure the rest of the course.

Scavenger Hunt

Directions to teacher: The scavenger hunt illustrates how food has been a concern for all kinds of people, in different cultures, and over time. Use the chart below, making additions as needed, to prepare separate cards for persons and concerns. Give each student a card that represents a person or a concern. Students should read the cards and move around the room looking for a classmate whose card has a concern that matches their person or a person who matches their concern. After matches are made, display the paired cards in the front of the room. Ask a representative of each match to read his or her information to the class.

Person	Concern
Pilgrims	were limited to the geographic area where they lived for their food sources.
Cave people	depended on very crude tools for hunting game and digging roots.
Immigrants	depend on the native people for information about available food resources.
Future world citizens	might use ocean farming to supply 20 percent of the world's food.
Supermarket shoppers	are presented with an abundance of media information regarding food and have a vast number of food choices to make.
Scientists	provide research findings about foods.
People living during Word War II	obtained food by standing in line and exchanging stamps for food items.
Advertisers	use newspaper, magazine, and television ads to promote certain kinds of food.
Early explorers	had to do without fresh fruits and vegetables while out at sea.
Future space travelers	may consume the packaging as well as the food wrapped in it.
Home-bound elderly	may rely on other people to deliver meals to their homes.

Food Timeline

Directions to teacher: Purchase or find pictures of the food listed in the chart below. Attach the clues to the appropriate food. Be sure to exclude dates when attaching clues to food and mix up foods before having students select one. Students should work as a group to arrange the foods in chronological order according to discovery date. After they have done this, they should create a timeline by guessing a discovery date for each food. Explain to students that the purpose of the activity is to guess approximately how long people have eaten these foods. They will not be able to guess the exact discovery date for each item. For example, archaeologists do not know exactly when the potato was discovered or if it was discovered before or after maple syrup. Students could add current foods and their discovery dates, for example, "hard ripe" tomatoes or imitation products.

Date	Food Item	Clue
pre-7000 B.C.	homemade bread	Homemade bread may have been a staple in the pioneer's diet, but it originated in the Middle East.
5000 B.C.	cob of corn	Corn was a popular grain that was dried and made into flour. Corn was a basic foodstuff in many American Indian civilizations.
5000-900 B.C.	maple syrup	North American Indians had plenty of maple syrup at the same time sugar was a rare and costly commodity in Europe.
5000-900 B.C.	potatoes	Potatoes were first grown by South American Indians. They were not introduced in Europe until 1570.
1790	ice cream	At a New York ice cream shop, George Washington ran up a bill of \$200 during one summer.
1801-1809	macaroni	Thomas Jefferson introduced macaroni to the United States.
1872	Cracker Jacks	Cracker Jacks had been around for 40 years before toy surprises were added in 1912.
1886	Coca-Cola	Coca-Cola was concocted by a pharmacist in Atlanta, Georgia, who touted it as a headache cure.
1895	Hershey chocolate bars	You could purchase two candy bars for five cents when they were first invented by Milton S. Hershey.
1904	hot dogs	Hot dogs were introduced at the World's Fair in St. Louis, Missouri.
1915	Kraft slices	Processed cheese, first made in Switzerland, was launched in the U.S. by Kraft.
1921 1923	Wonder bread Skippy peanut butter	Nationwide marketing of Wonder bread and Skippy peanut butter began within two years of each other.
1929	baby food	Baby food was first marketed in grocery stores.
1930	Twinkies	The debut of Hostess Twinkies comforted the nation during the depths of the Great Depression.
1930	sliced bread	Sliced bread was the niftiest thing to be introduced as a new decade began.
1937	Spam	Spam was introduced in time to become a staple in foxholes during World War II. It has a seven-year shelf life!
mid-1940s	Swanson frozen dinners	Swanson introduced frozen dinners at the time of the home television boom. TV dinners came about 10 years later.
1948	cake mix	General Mills introduced cake mix.

American Eats

By Colin Covert and Jeremy Iggers. ©1983. Reprinted by permission of the authors.

America, America! Your cuisine is as broad as your borders, as varied as your terrain, as rich as the past of your people. It is the oysters and lobsters of New England, Virginia ham and Florida pompano, the chili and guacamole of New Mexico, the beef and game of the Great Plains, the cioppino and quiche of San Francisco.

It is the prodigious regional bounty of a fruitful land: turnips, corn, and blueberries, turkey and tomatoes and the great American lobster *homarus Americans*. It is Long Island duckling and New Orleans crayfish. Texas pink grapefruit, Hawaiian pineapple, Minnesota wild rice, key lime pie, and baked Alaska.

It is spices and cooking techniques with roots in almost every land meeting and blending together in a succulent synthesis. The time is nearly forgotten when a pasta sauce was beyond the ken of all but Italian cooks, when plantains were unknown in the nation's supermarkets, and when only Asians cooked with a wok. Today lasagna, egg foo yung, and blintzes are considered as American as apple pie. Not for nothing is our nation called the world's melting pot.

Though its role has been largely neglected by historians, food has played a central part in American history. The fate of any country depends on the ability of its people to put food on their tables; the manner in which they do so provides special insights into the quality of life in a given time and place. Like its art or its architecture, a nation's cuisine is a key to its sensibility.

It's fitting, then, to retrace the developments that carried Americans from squirrel-based Brunswick stew to microwave TV dinners in only 350 years. Those who do not learn from the mistakes of the past are condemned to re-eat them.

1872 F. W. Rueckheim introduces Cracker Jack sugar-coated popcorn. "Take Me out to the Ball Game" immortalizes the product in song (1908). Toy surprise added in 1912.

1886 Coca-Cola is created in syrup form to be used at an Atlanta, Georgia, soda fountain. By 1982, it is the world's most popular commercially prepared beverage, consumed at a rate of more than 235 million drinks a day.

1890 Dr. Thomas Bremwell Welch introduces Dr. Welch's unfermented wine for use in church services. Rechristened Welch's grape juice, it is introduced nationwide at the 1893 World's Fair.

1895 Milton S. Hershey invents the Hershey bar.

1902 The Pepsi-Cola Company is founded. Automats offer food for "a nickel in the slot."

1903 A scoop for ice cream cones is patented by an Italian immigrant living in New Jersey. Margarine's skimmed milk and animal suet are replaced by vegetable oils, improving its flavor and texture.

1904 Hot dogs are introduced at the St. Louis World's Fair. George J. French introduces prepared mustard the same year.

1915 Processed cheese, first made in Switzerland, is launched in the U.S. by Kraft. Though more expensive than fresh cheese, processed becomes popular because it keeps indefinitely in its sealed packet.

1917 American nutritionists Graham Lusk and R.J. Anderson show that the body energy production is related to the number of calories consumed regardless of their source.

1919 The first airline companies begin to offer pre-packed lunch boxes at mealtimes.

U.S. bacteriologist Georganne Burke defines the organisms that cause botulism.

Food chemist Joseph Cohen develops gelatin from a substance contained in bone, cartilage, and tendons.

1921 Wonder bread begins nationwide marketing.

1923 Skippy peanut butter does likewise.

1925 Automatic potato-peeling machines introduced; production of potato chips booms.

Battery-heated cages for laying hens are introduced in the United States. Egg production rises.

1928 Will Kellogg introduces Rice Krispies in his continuing effort to change the breakfast habits of the nation.

1929 Grocery stores begin marketing prepared baby foods.

The Postum Company begins selling packaged frozen foods (meat, fish, vegetables, and soft fruit) in Springfield, Massachusetts. Expensive and unfamiliar, they get off to a slow start.

Poultry farmers construct year-round rearing sheds, making spring chickens a thing of the past.

The in-sink electric garbage disposal becomes available to those who can afford it.

1930 Sliced bread introduced. The niftiest thing!

Hostess Twinkies' debut comforts the nation during the depths of the Great Depression.

1931 The first bouillon cubes are imported from Europe.

Miles Laboratories introduce Alka-Seltzer, soon to become a traditional digestive aid.

1933 In the United States, 516 grocery stores now carry frozen foods.

1936 Allis-Chalmers' inexpensive "baby" harvester brings mechanization to farms nationwide.

Vitamin Plus, the first commercial nutritional supplement, hits retail stores.

1937 Spam Luncheon Meat (chopped shoulder meat with ham added) is introduced by George A. Hormel & Company. Its seven-year shelf life makes it a staple in Allied foxholes during World War II.

1939 Birds Eye Foods introduces precooked frozen foods.

Mid-1940s Swanson frozen dinners are introduced. The first offering is Pilgrims' favorite—turkey.

1942 H.J. Heinz sends self-heating tinned foods to the front. The heating mixture, ignited by fuse, evenly heats cans of soup in battlefield conditions where conventional heating methods are impractical.

1945 Fluoridated water is introduced after dental researchers discover fewer cavities among population of areas with naturally high fluorides. Political controversy rages to the present day.

1945 Minute Maid Company joins the war effort, developing powdered orange juice that soldiers can reconstitute in the field. War ends one month after the powder is developed, so the company turns to frozen juice concentrate for the civilian market.

1947 The first microwave cooker, a spin-off of the development of radar, goes on sale in the U.S. Domestic models appear in 1965.

1948 General Mills introduces cake mixes.

1948 The first McDonald's hamburgers (ten to a pound) are sold by brothers Maurice and Richard McDonald at their drive-in restaurant in San Bernardino, California. Ray Kroc founds the nationwide chain in 1955. The quarter-pounder is introduced in 1971.

1949 Cyclamate-based artificial sweeteners are introduced for the weight-conscious.

Diner's Club, the first credit card organization, allows Americans to eat on credit.

1954 TV dinners make their debut.

1955 Electric deep freezers do likewise.

1956 Colonel Harland Sanders franchises his method of frying chicken under pressure in vegetable shortening with a blend of eleven herbs and spices. If all the "Kentucky Fried" chickens sold by 1980 were placed end to end, they would stretch for 93,000 miles.

1958 Instant mashed potatoes arrive.

1969 Yogurt makers for the home are introduced.

1974 A Gallup Poll reveals that Americans' favorite food is pizza.

1975 U.S. scientists develop a breed of featherless chickens, but the higher heating-fuel bills for their houses more than offsets the savings from the elimination of the defeathering process.

U.S. scientists investigating the diet of primitive humans report that, in terms of variety, the pinnacle of success was reached 5,000 years ago as a hunter and gatherer of roots, tubers, seeds, and berries.

1976 Culminating fifteen years of research on mutants obtained by nuclear irradiation, a new U.S. variety of seedless squirt-free grapefruit is introduced.

1980 A U.S. government survey finds french-fried potatoes are the nation's most-consumed vegetable.

1981 The U.S. Department of Agriculture announces that catsup and relish will be redefined as vegetable substitutes in school meals. Following public outcry, they are quickly restored to their former status as condiments.

Questions

After constructing the timeline and examining the article, students should respond to these questions:

- What surprised you most about these foods?
- How are today's foods similar to those used years ago?
- How are they different?
- Why have these changes occurred?
- What kinds of foods do you expect to be available in the future? Why?
- Write a statement summarizing the timeline.

Perfect Food Activity

Directions to teacher: Have students form small lab groups to select or invent a perfect food. Do not discuss as a class what is meant by "perfect" nor give them a definition of what a "perfect food" is. Students should discuss this project within their groups and come to a consensus about what to do. Provide criteria to consider when selecting their perfect food for preparation in lab and for making plans to carry out the lab experience. The following guidelines are suggested:

- The product must be something you will eat.
- The product cannot be baked.
- The product must be appealing to other people.
- You are not to make any more than you can eat.

Individual teachers need to take into consideration what guidelines and lab plans are appropriate for their classes. For example, if the students have had previous lab experience, the second guideline may not be necessary. Limit the number of guidelines to encourage creativity.

Following the lab experience, each group of students will present a one-minute commercial in which they tell the class why their food is perfect. Encourage creativity with the form of the presentations. For example, students can use videotape, audio tape, posters, dramatization, and song. The following question may help students to think about what information to include in their commercial: Beyond the guidelines provided in class, what did you take into consideration when selecting or creating the perfect food?

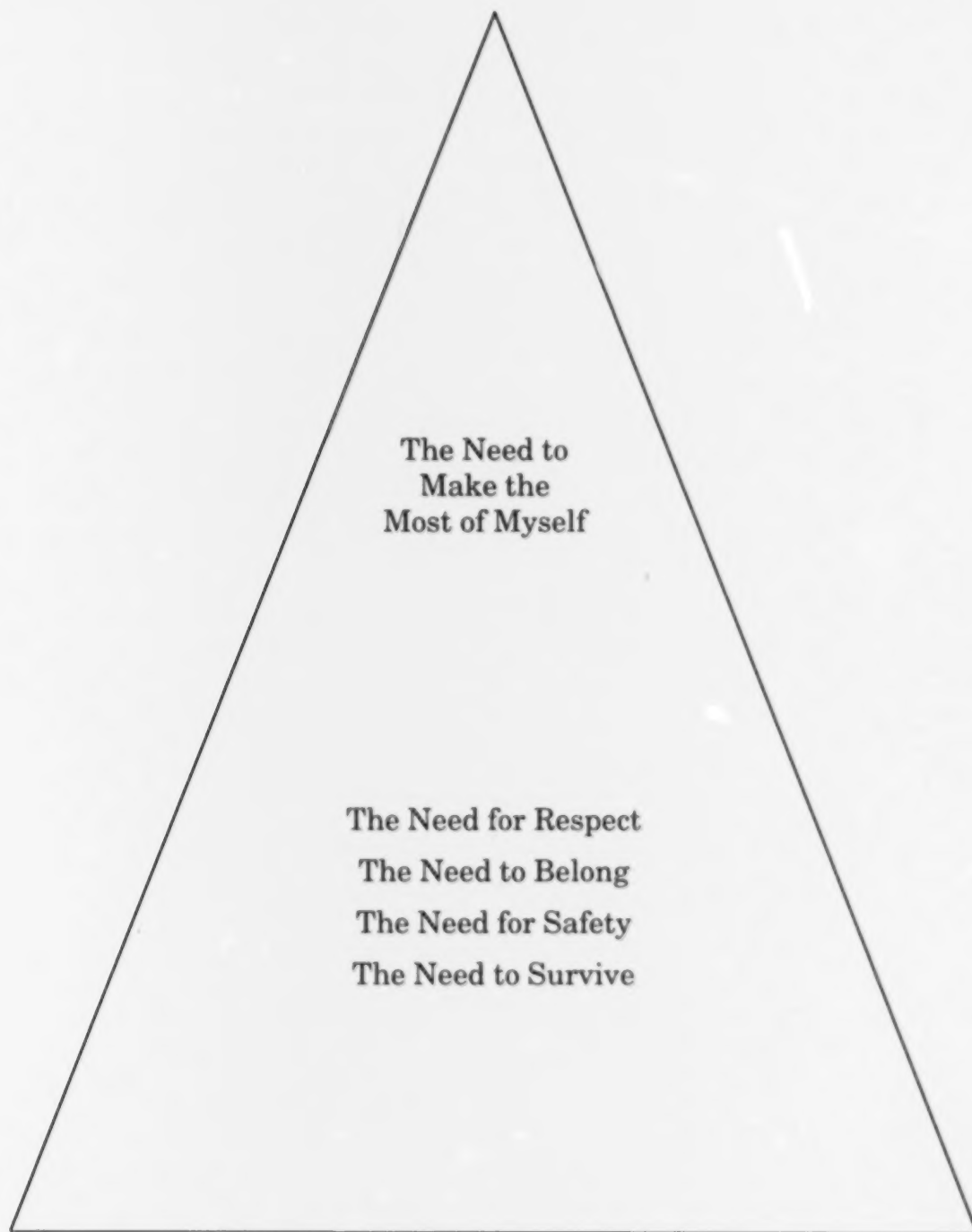
While the commercials are being presented, students should list the key ideas in the presentations on the worksheet in support material ■ A.5. When all commercials have been presented, students can complete the remaining questions on support material ■ A.5 and discuss their ideas as a class.

Use these questions as a follow-up to help students analyze the reasoning that lead to the perfect food selections:

- What is the first thing that came to mind when you were asked to think about a perfect food?
- Why did you think that?
- How did your ideas compare to those of others in your group?
- What does this activity tell us about how we use food?
- What human needs does food satisfy?

1. List the key ideas presented in the commercials.
2. How are these ideas similar?
3. Write one statement about foods that are considered to be perfect.
4. How might food-related businesses, for example market research, advertising, and product development, make use of this information?
5. How do these ideas relate to the timeline? How do the ideas relate to your prediction of what future foods might be like?

The Need Pyramid



Meanings of Food

This activity will help you get better acquainted with your classmates by learning about their food habits.

Directions

1. Find people who represent each of the following situations in column II and have them write their names in column I. You must use a different person for each statement.
2. Then, working as a large group, examine each situation in column II. Group the situations into broad categories by thinking about which situations demonstrate similar ideas about food. What meanings of food do these broad categories of situations represent?
3. Complete column III by writing whether each situation in column II represents a physical, social, or emotional meaning of food.

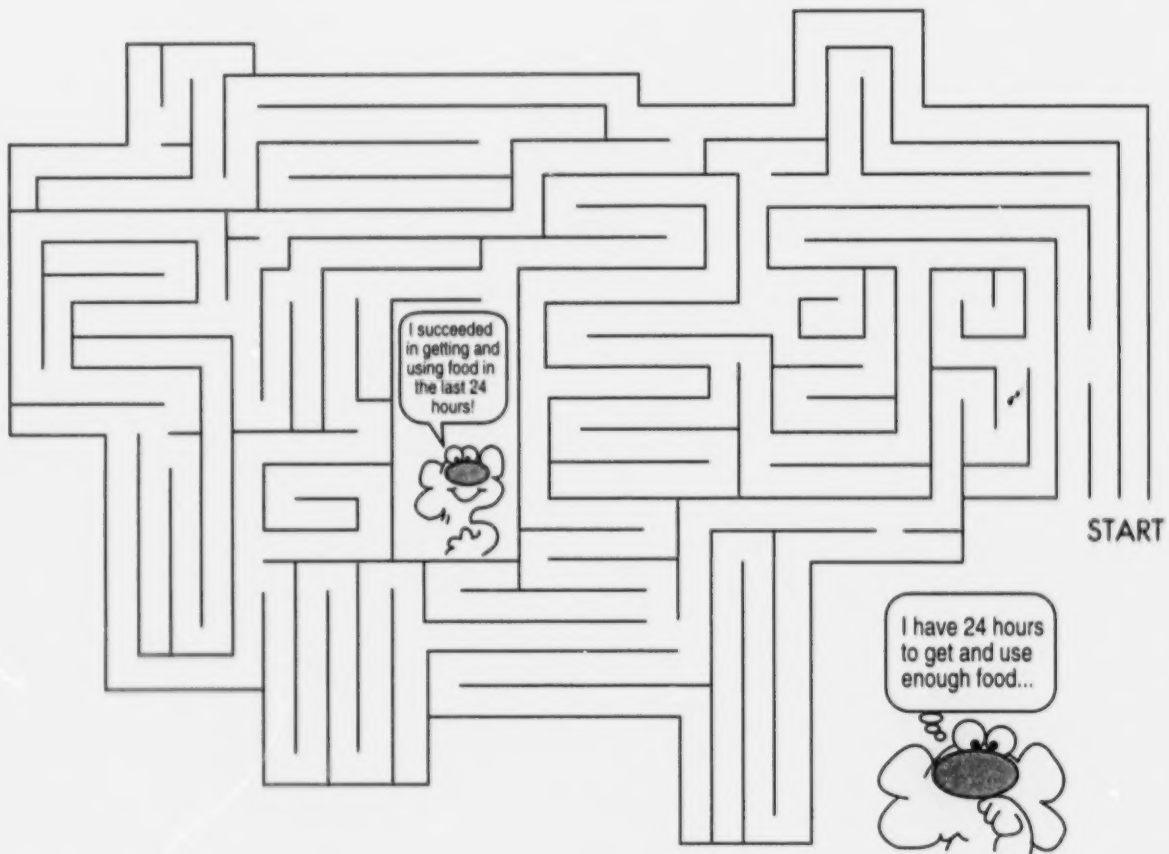
I. Name	II. Food-Related Situation	III. Meaning of Food
1.	eats when he or she is bored.	
2.	has given food as a gift.	
3.	has food cravings.	
4.	snacks after school.	
5.	eats or does not eat a food because of religious beliefs.	
6.	eats lots of fruits and vegetables because they are nutritious.	
7.	has a family that traditionally eats a certain food on a holiday or for a celebration.	
8.	has fasted for one or more days.	
9.	snacks while watching television.	
10.	rewards himself or herself with food after accomplishing something.	
11.	has eaten a candy bar before practicing for a sport.	
12.	enjoys going out for pizza with family or friends.	
13.	closely watches his or her weight.	

I. Name	II. Food-Related Situation	III. Meaning of Food
14.	as a child, was rewarded for good behavior with food.	
15.	likes to prepare a certain food for or eat a certain food with a certain person.	
16.	has a family that eats a certain food to prevent or help take care of illness.	
17.	enjoys learning about other cultures and sampling cultural foods.	
18.	expects to be served a meal when invited to a wedding reception.	

4. Write one general statement about meanings that people associate with food.

Complex and Daily

Directions: Beginning at the starting point, see how many different ways you can get through the maze. Number each dead end when you come to it. Then, for each dead end, indicate a reason why individuals and families may have difficulty getting and using food on a daily basis.



- Working in groups, select one of the categories below and indicate why these people may have difficulty getting and using food on a daily basis.

● teenagers	● families in which all adult members work outside the home
● elderly	● single-parent families
● families with a chemically dependent parent	● immigrants to the U.S.
● homeless families	
- Why was a maze used as a part of this activity?
- Write four statements that describe the process of getting and using food.

Genetic Spud Will Kill Insect Pests

Antigo Daily Journal, May 6, 1995. Reprinted with permission.

A potato that has been genetically doctored to kill its No. 1 insect pest was given final government clearance Friday and should reach supermarkets in the fall of 1996.

The Environmental Protection Agency, under rules governing pesticides, approved full commercial production of Monsanto Co.'s NewLeaf potato.

The potato has been genetically altered to produce a naturally occurring toxin, already used by organic producers and home gardeners, to kill the Colorado potato beetle. It is the first pesticide-producing crop to win approval.

The agency in late March had given St. Louis-based Monsanto permission to grow seed potatoes for harvest in the fall. Those seeds will be planted next spring for a 1996 harvest.

The Food and Drug Administration has already declared the potatoes safe for humans, and a few have already been sold. Government policy does not require separate labeling for most biotechnology products because the foods are considered no different from those bred by other means.

Calgene's genetically engineered tomato, touted because it stays ripe longer, is voluntarily labeled for marketing reasons.

Monsanto developed the potato by introducing genetic material from *Bacillus thuringiensis*, a soil bacterium. The Colorado potato beetle is the leading cause of insect damage to the nation's potato crop, especially in the East and Upper Midwest.

By using the natural pesticide, which is harmless to humans, birds, other animals and beneficial insects, a farmer can use fewer of the more environmentally harmful and less efficient conventional pesticides. "If it's competitive in price with what it costs him to control the potato beetle with insecticides, it makes more sense to buy the seed with Btg (the bacterium), because he doesn't have all the regulatory hassles now that you have with pesticide application," said Dennis L. Corsini, an Agriculture Department potato specialist at the University of Idaho. "It's safer to the environment. It actually does a better job."

The chief criticism of the product comes from the Union of Concerned Scientists, which says that such widespread use of a pest control favored by environmentally conscious growers may lead to development of resistant bugs. Resistance is already a problem with conventional pesticides.

The company says it has devised a pest management plan to eliminate that risk.

Corn and cotton with the same pesticide-producing capacity are awaiting approval. A yellow squash that has been engineered to resist a common virus has been approved, and commercial planting could begin late this summer.

Directions to teacher: Announce that there will be a competition in class that day for the best cookie made using only the information in the recipe given each group. Tell students to guard their recipe carefully since they may have information that allows only their group to make the best cookie.

Distribute the original no-bake recipe to lab 1 and the other recipe to labs 2, 3, 4, and so forth. (See support material ■ A.11.)

Tell students they can leisurely spend the class period preparing the recipe. The cookies will be judged after 40 minutes.

Allow them to start. Just as they are getting ingredients, interrupt them, saying that there is no more oatmeal, so labs 3 and 4 will use whole wheat flour instead. It also looks as if the vanilla is running low, so lab 2 will not get any today.

Approximately ten minutes into lab, remark that one group already has their recipe mixed and ready to cook, so you have changed your mind about the time it should take them to finish this. They should now all be done in seven minutes. Anyone who cannot get done by then will be graded down.

Allow them to finish.

Bring all students together to a central location where all can see the cookies. Have each group bring their recipes and cookies. Group by group, ask them to describe the directions they followed.

Evaluate and grade the cookies. Lab 1 will get an A+ and the rest will get Cs or lower.

Allow them to think you are serious about the evaluation for a moment before stating that this lab was an experiment so students would experience powerlessness. Have students list all the concerns they had about the lab that led to their feelings of powerlessness. Help them identify these concerns. For example,

- Recipes and ingredients were not distributed equally.
- The teacher had control over students' grades.
- Students felt rushed due to time pressures.
- Students felt confused due to conflicting information.
- The product was different from what students expected.

Conclude by asking what concerns the groups had during the lab and in what ways they felt a lack of control.

Note: Teachers should get to this point in one class period so that the students can discuss powerlessness as they experience it.

Unplanned Lab Recipes

Original No-Bake Cookies

1. Cover a plate with wax paper.
2. Combine in a small saucepan:
 - 1 tablespoon of margarine
 - 1 tablespoon of milk
 - 1/4 cup sugar
 - 1 tablespoon cocoa
3. Boil mixture on medium heat for 1 minute.
4. Add and stir together:
 - 1/4 cup + 2 tablespoons oatmeal
 - 1/8 teaspoon peanut butter
5. Drop by spoonfuls onto plate.
6. Refrigerate until firm.
7. Wash and dry dishes.
8. Eat and compare.
9. Finish clean-up.

No-Bake Cookies

1. Cover a plate with wax paper.
2. Combine in a small saucepan:
 - 1 pat of margarine
 - 2 capfuls of milk
 - 3 spoonfuls sugar
 - 5 pinches cocoa
3. Boil mixture on medium heat for 1 minute.
4. Add and stir together:
 - 1 handful oatmeal
 - drop of vanilla
 - walnut-size amount of peanut butter
5. Drop by spoonfuls onto plate.
6. Refrigerate until firm.
7. Wash and dry dishes.
8. Eat and compare.
9. Finish clean-up.

Lab Concerns Sheet

Directions: You just experienced feelings of powerlessness while working in the foods lab. Now, working in a small group, further explore your concerns about the lab by describing actual food-related situations that might promote feelings of powerlessness.

Concern 1: Recipes and ingredients were not distributed equally.
In real life, what food-related resources are not distributed equally?

Concern 2: Teacher had control over your grade.
In real life, what people or groups of people control our food-related tasks?

Concern 3: Students felt rushed to complete work.
In real life, how do time pressures complicate food-related tasks?

Concern 4: Students received conflicting information.
In real life, what are some conflicting messages we get about food?

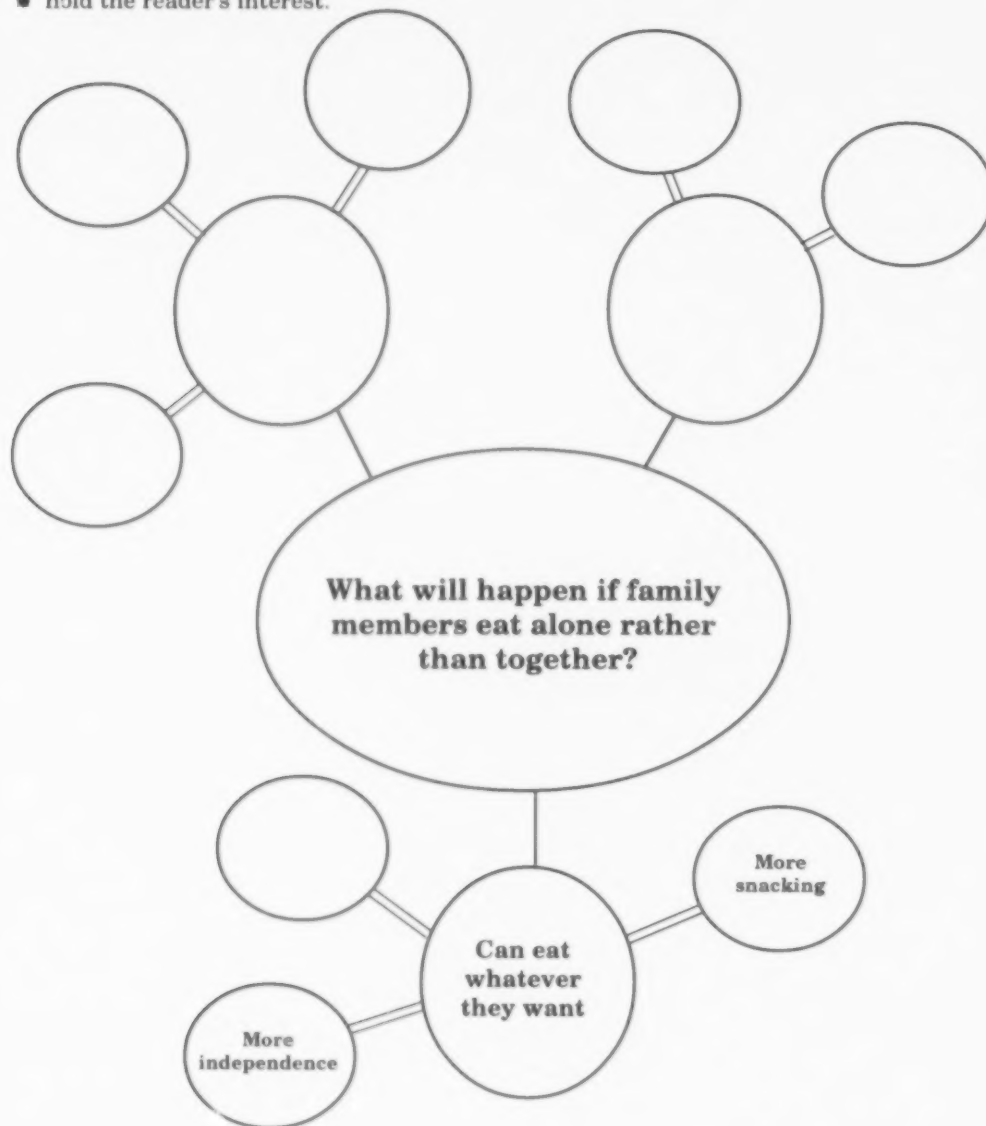
Concern 5: The product was different from what students expected.
In real life, how are food products often different from what you expected?

Impact Chart About Food Attitudes and Practices

Directions: Select one food attitude or practice illustrated in the pictures and develop an impact chart to show its consequences. An example is provided below.

Summarize your impact chart by writing a scenario of a real-life situation. The scenario should

- depict a real-life situation.
- illustrate a food attitude or practice.
- show the consequences discovered.
- hold the reader's interest.



Recipes for an Indian Meal

Kachumber Salad

2 cups cooked or canned chick peas, drained
1/4 cup chopped cucumber
1/4 cup chopped tomatoes
1/4 cup cooked potatoes, cubed
1/4 teaspoon salt
juice of 1 lemon

Combine all the ingredients and serve on lettuce leaves.

Boiled Rice

2 cups long-grain rice (not quick cooking variety)
3 cups water
2 teaspoons salt

Combine rice, salt, and water. Bring to boil, reduce heat, cover, and simmer for 12 minutes without lifting cover. Fluff rice with fork, put folded dish towel over pan, replace cover, and leave for 20 minutes.

Lassi (a refreshing drink)

1 cup plain yogurt
1 cup cold water
1 teaspoon honey

Combine and serve cooled with fresh mint.

Curried Dhaal with Rice

1 cup dried lentils
3 cups water
2 onions, chopped
salt to taste
3 tablespoons butter or oil
1 1/2 teaspoons curry powder

Combine lentils, water, one onion, salt. Bring to boil, reduce heat, and simmer covered until lentils are tender. This should take about 40 minutes. Drain.

In a skillet, heat the butter or oil. Add the other onion and cook until it begins to brown. Add to the lentils. Add curry powder and cook until lentils are very tender, which should take about 10 minutes. Serve on boiled rice, and garnish with fried onions (recipe below) and sliced lemon.

Fried Onions

1 medium onion sliced
2 tablespoons butter or oil

In a skillet heat the butter or oil. Do not allow fat to burn. When hot, reduce heat, add sliced onion, cover, and cook until tender.

Determining Food-Related Concerns

Directions to teacher: Have students look through a stack of newspapers for food-related stories. Ask students to condense the main idea of each story into a phrase or statement and write the idea on a piece of paper. When students have exhausted the stories in the newspapers, have them generate other phrases about food-related concerns based on their past experiences. Remind students to write each idea on a separate slip of paper.

Then ask students to separate their statements into groups based on common ideas and to label each group. Students should share labels with the entire class as the teacher lists them on the board.

Working as a large group, students should group the labels into more general concerns, again based on similarities.

Afterward, ask students the following questions about the thinking processes involved:

- List the processes you just went through to organize the phrases.
- What thoughts occurred to you as you went through each of these processes?
- Why might it be important to evaluate thinking processes?
- When might you use these processes in your everyday life?

Students have been engaged in the intellectual skill of concept formation, which includes listing, grouping, and labeling. To point out the difference between broad and specific concerns, state that broad concerns include many ideas while specific concerns are narrower in scope and can be grouped under many different broad concerns.

From *Teaching Human Beings* by Jeffrey Shrank. Copyright ©1971 by Jeffrey Shrank. Reprinted by permission of Beacon Press.

One day ant was assigned his first task outside the anthill. He was told to drag back a dead grasshopper....

Out went our young hero. Upon exiting from the anthill, he was profoundly impressed and even shocked at the size of the outside world. He had heard tales that the world was larger than his own world, but never had he experienced such massive size.

At once he scurried in search of the grasshopper. As he continued his search, carefully following the directions, he came to a barrier that he could not surmount. So he did what any good ant would do: he crawled under. Upon so doing he was again confronted with a shock that would have caused a heart attack in a weaker ant. The world was immensely larger than he had dreamed. For it seemed that the anthill had been located under a bushel basket and what he thought was the outside world was only the area covered by the basket. But now he was faced with the whole world. He realized that he really had been unable to understand his environment until he had gotten out of it. Only now did he see that the anthill was covered by a bushel basket.

He still had not found his grasshopper, so he continued on. Again a barrier stopped him until he was able to burrow under it. And another shock greeted him. For once on the other side of the barrier, he realized that the bushel basket was located in a greenhouse and that what he had thought was the big wide world was really only a small greenhouse. Now that he was outside the greenhouse he could understand.

Well, the story goes on because it turns out that the ant, intelligent as he might be, still didn't know where he was. For the greenhouse was located just outside center field of the Astrodome in Houston. And, you see, that ant really isn't any different from you or me.

Consider the following questions:

- How does this story show a relationship between a specific individual and something larger?
- When have you felt part of an ever-increasing world?
- What does this story tell us about the relationship between specific individuals or things and larger, broader ideas?

Homo Sapiens at Home

By David Horsey. Reprinted courtesy of the *Seattle Post-Intelligencer*.



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Food-Related Cartoons

Directions: Select three cartoons and complete the chart below.

	What concern does the cartoon depict?	What are some consequences of this concern?	What action might people take in regard to this concern?
Cartoon No. 1			
Cartoon No. 2			
Cartoon No. 3			

Mind-Stretching Puzzles

Directions to teacher: Use puzzles and brain twisters to illustrate new ways of thinking. A list of books of brain teasers is provided below, but teachers can use any books of puzzles found in their school library.

Suggested Books

Dudeney, Henry Ernest. *536 Puzzles and Curious Problems*. New York: Charles Scribner's Sons, 1967.

Emmet, E.R. *Brain Puzzler's Delight*. Buchanon, NY: Emerson Books, Inc., 1978.

Harnadek, Anita. *Mind Bender Series*. (Interdisciplinary books at four levels of complexity and software game.) Pacific Grove, CA: Critical Thinking Press and Software. Catalog available. P.O. Box 448, Pacific Grove, CA 93950. (800) 485-4849.

Morris, Ivan. *The Lonely Monk and Other Puzzles*. Boston: Little, Brown and Company, 1970.

Pool, John. *Lid Off a Daffodil*. New York: Holt, Rinehart and Winston, 1982.

Smullyan, Raymond. *The Lady or the Tiger and Other Logic Puzzles*. New York: Alfred A. Knopf, 1982.

Thinking Works. Catalog available. P.O. Box 468, St. Augustine, FL 32085-0468, (800) 633-3742, Fax: (904) 824-8505.

Townsend, Charles Barry. *World's Most Baffling Puzzles*. New York: Sterling Publishing Co., Inc., 1991.

Wells, Fred. *Puzzles and Brain Twisters*. New York: Simon and Schuster, 1970.

Instructions

1. Give students one puzzle to work on together as a large group.
2. Divide students into small groups and give each group the supplies for another puzzle.
3. After approximately seven minutes, each group should rotate to a new puzzle.
4. When all the groups have attempted all the puzzles, each group should answer the following questions.

Discussion Questions

- What process/steps did you use to solve the puzzles?
- Do you use this thinking process in everyday food situations? If so, when?
- When have you used this way of thinking during the past class sessions?
- Sometimes what people see or hear is distorted by the things surrounding an event or an idea. When is this true regarding food?
- How often do mental expectations interfere with perceptions?

A Trip to the Grocery Store

Directions: As you read, imagine you are the person in the story. Think about the food choices you would make. Take your time reading and imagining, then answer the questions on the last sheet.

Part 1

You are sent to the store to pick up some milk for supper. Picture yourself walking through the parking lot, approaching the door of the store. Just as you step up to the entrance, a person in a ski mask carrying a bank deposit bag comes bolting out of the exit door and slams into you full force. The impact knocks both of you off balance and sends the masked person to the ground. As you struggle to regain your balance, you see the automatic door swinging toward your head.

You groggily look around and realize you must have been knocked out by the impact from the automatic door. You discover that you are no longer laying at the entrance to the store but that you are slowly being moved through the open door of the store on some type of conveyer. You hear a soothing but monotonous voice coming from a speaker behind you. Now you notice that you are not laying down at all but seated in the back seat of a car like the ones on a roller coaster. You expect the voice to instruct you to remove all loose items and fasten your safety harness securely, but then you remember that you are at the grocery store. You still feel a little woozy, but you concentrate on the voice.

You hear, "Hello. Welcome to the Mile-long Aisle Store. We hope your shopping experience is comfortable and enjoyable. Please sit back and relax. At this time, enter your personal shopping number in the box in front of you." You look around and notice you have a plastic card in your hand with your name and a 20-digit code imprinted on it. You type the number into the keypad.

Now your personal car begins moving toward a wall and you glide through a curtain of heavy plastic strips. The voice announces, "You are now approaching aisle 1. Please make your selections." Your car twists and turns its way through display after display of every type of vegetable and fruit imaginable. There are all the common types of produce, plus fruits you have only seen in pictures in magazines. In amazement, you forget to make any selections. You just watch everything as you pass by. Television monitors above the food are showing videos of serving ideas that make your mouth water.

Then you see a display of the largest, most luscious, and sweetest smelling strawberries you have ever encountered. Your eyes widen, then immediately a robotic arm picks up a quart of berries and gently deposits it in the front of your car, which is especially designed to hold your selections. A scanning device reads the code and records the price. The price is easily viewed on the digital readout screen on the front of your car. You are shocked at the astronomical price. Before you can put them back, you find yourself moving forward and more and more fruits and vegetables are added to your car.

By the time you reach the end of the produce section, you realize that the television monitors above contain microcameras that are sensitive to changes in the size of the pupils of your eyes, and every time you react positively to a display, the automatic system selects, scans, and bills you for your choice. You wonder if closing your eyes is the only way to stop the process, but at this instant, your car moves you through another plastic strip door, turns

quickly, and then stops near a small machine. The voice instructs you to put your finger in a slot near the top of the machine and seconds later another card, similar to the one in your hand, is automatically attached to the scanner on your car. You are able to see several lines of code numbers on it.

Now you begin to move again and the voice informs you of the importance of the coded information on your new card. You hear your calorie and nutrient needs described in almost clinical terms.

You are now moving down the aisle of breakfast entrees. You reach for your favorite breakfast cereal, but you feel a small electric shock run through your fingers, and you immediately let go. You make a second choice and again you are zapped. You figure out that what you are choosing does not match the health information on your electronic card. You decide to let the robotic arm indicate several selections for you.

Now you sense cold air, and as your car turns once more, you enter the frozen entree aisle. You are surprised that the entire area is kept at zero. The blasts of chilled air from the refrigeration units feel so cold that your eyelids stick together. The automatic monitors note this as well, and a buzzer sounds and a button begins to flash on the display panel in the front of the car. You continue down the aisle, the frost melts from your eyelids, and you find items once again being put in your car as you signal with your eyes. You are disappointed that with your health card, you are refused some entrees, no matter how longingly you stare at them. On the other hand, you are happy that you did get some things you like.

You turn the next corner and get excited because you see one entire mile-long aisle of food samples. As soon as you push the button, the bubble top is removed, and the smells of hundreds of samples assail your nostrils. Your nose, even more than your eyes, senses food you love! You reach for the first sample—and feel that now familiar jolt. That health card is really limiting your fun. You remove the coded card from your car and bury it in a deep dish pizza sample. At last you can taste everything you want!

As you round the next corner, you discover an aisle of prepared meals—holiday favorites from across the United States and around the world. The smells and sounds of an international bazaar surround you, and you are happy to discover that once again samples are free. You move along until you come upon your family's favorite. You decide then and there to buy enough for all your relatives. You signal with your eyes. You press buttons on the robotic arm. You plead with the electronic voice to tell you what to do. Your coded card is missing. You can try but not buy.

Your car moves you on at the predetermined pace. A turn brings you to an aisle that amazes you with choices of beverages. You see every brand of juice, soda, and milk. Milk? Do you remember that you came to the store for milk? You are surprised to find you are able to make your selection without electronic interference—and the robotic arm places a quart (or is it a liter?) in with your other groceries. All right! No problem with cards or zaps or anything else. Beverages are yours for the taking! You reach out to make your next selection.

But now you feel yourself being picked up and moved by the robot. Then you are gently set back down, and you feel a soft pillow-like object beneath your head. You hear a different voice. This voice sounds anxious. "Are you all right? Are you okay? You are a real hero—you tackled that thief and held on until help arrived! Congratulations! We can't begin to thank you enough. But to show our appreciation for your heroic actions, we want to give you a \$100 shopping spree in our store!"

Part 2

You think, "Well, what should I do? I have this money, and I still haven't picked up the milk I was supposed to get. I bet everyone at home will be worried because I am so late. I think I will get the milk and surprise them with some other groceries as well."

As you enter the real store, you find that there are carts available for your use without scanning devices attached. Since you will probably buy quite a few groceries with the money you were given, you grab a cart from the neatly arranged row. Down the aisle you go. You can see the end of the aisle, and there are signs telling you where you can find most anything you want.

You smell the spicy aroma coming from the deli. You are hungry, but you wonder whether you should buy things to satisfy your immediate cravings or things your family really needs. You walk right past the deli, remembering what you came to buy.

As you walk past the attractively displayed snack foods, you think about your dream and the zap you got reaching for foods that contained so many empty calories. You wonder, Should I or shouldn't I? You consider and then choose.

Who are you trying to kid? You are making this choice based on taste, not nutrition.

As you reach the produce aisle, you notice how attractive the beautifully colored and shined products are in the display case. You notice sprayers operating over the foods to keep them fresh.

You continue walking to the aisle with the breakfast cereals. You remember the zipper-robot from your dream. You notice everything from bran flakes to sweetened cereal. You remember some of the commercials on Saturday morning cartoons claiming their products are healthy. Confusion wells inside you. But wait. Maybe you can figure it out yourself by reading the labels. You think about it and make a choice.

Around the corner you go. You feel the same cold sensation you felt in your dream. But this time your eyelashes don't get frosted. You figure this aisle will be your final destination as you reach for the milk you were supposed to get in the first place. Choices and decisions are finally over. Or are they?

The check-out person now asks you to decide whether you prefer plastic or paper bags. You remember hearing something in school about recycling problems and the long-term consequences of choices.

Discussion Questions

- How did you feel about the grocery choices in the dream?
- How did you feel about the grocery choices in the real store?
- What foods did you decide to buy?
- What did the groceries cost?
- What questions did you ask yourself to help make the decision?
- How were your lists different?
- How were your lists alike?
- What are some reasons for the differences?
- What were the differences between the two parts of the story?
- What might be the consequences to society if everyone shopped as you did in the dream?
- Looking at the consequences, what food-related beliefs and practices should people strive toward?

What I Have Learned

Directions: Complete the following statements with the thoughts that come to your mind when you read them. For each statement, write two or more sentences. Select ten statements to complete.

1. In the past food was...
2. In the future food might be...
3. In addition to meeting a physical need, food meets...
4. People sometimes use food to...
5. Getting and using food can be complex because...
6. Conditions that make it difficult for some people to get and use food include...
7. Some individuals may feel that they do not have control over their food choices because...
8. We should be concerned about food because...
9. Food is/is not (circle one) a concern in my life because...
10. A new way of thinking about food is...
11. One thing that could be done about food is...

Talk Show: Section A

Direction to teacher: Select one student to play the part of the disc jockey and introduce the other characters. After the introductions are finished, ask students to review the thinking and social skills in this module, for example, observing, inferring, perspective taking, and differentiating and integrating concepts.

Station: WAPL, The "Rockin' Apple"

Character Sketches

D.J. Norm Attitude: The hosts of all hosts! This guy is a little wacky, and basically likes to get a good conversation going. In fact, now and then, he comes up with some very thought-provoking questions. He doesn't share his own attitude much, but he does try to get a rise out of his guests and keep the show moving along.

Dori Toze: Dori seems to be the epitome of junk-food junkies. All he's known all his life is eating whenever he feels like it and whatever tastes good to him, which happens to be most of the time and mostly fast food. He feels he's a smooth-talking, confident dude who believes in doing what he wants to do! Dori is native to the big city, as is another guest Di Etrays. He hasn't been outside the city much and never outside the state, so he and another guest Dee, who has traveled extensively, have a bit of rivalry going when they get together because of their different experiences.

Chip N. Dip: If you had to pick a guy who is a little out of the mainstream, it's Chip. He likes to do his own thinking and not follow the crowd but is quite conservative and traditional in his thinking. He keeps his opinions to himself. Chip is into all sorts of less talked about hobbies, such as hang gliding, collecting comics, and snowshoeing. He seems friendly, serious, and a good listener and thinker.

Dee Lishus: This woman is a world traveler! She has been to many places in the world and has a passion for the new and unusual. Filled with cultural experiences, wild ideas, and a willingness to try anything, Dee is quite the talker! She loves to gab and think aloud. She is quite outspoken. Dee comes from a very supportive family that has introduced her to many new things and given her much independence, and although she is used to city life, her parents have always lived in the outermost suburbs.

Di Etrays: This young woman is best described as a combination of a sixties "flower child" and an eighties "material girl." Although that may seem like a contradiction, Di strikes an odd balance of open-mindedness, acceptance, and obsession for looking perfect. A city native all her life, Di is looking forward to attending college, or technical school, in a year in a small town four hours from her home. She plans to study the environment.

Hal Thinut: Probably the most health-oriented guy of the bunch, Hal is into nature and saving the environment. He sees himself as being the typical American kid who loves sports, movies, and video games. Most of what he learned about health came from parents and reading on his own. He grew up on a farm outside a small town, so he finds some of the other guests different from himself but interesting.

Back in a minute after a commercial!

Conceptual Statements

▼ **Families have a continuing concern about the development of food attitudes and norms.**

Food attitudes are a collection of interrelated ideas and feelings held by individuals, families, and societies.

Food norms are social standards or expectations that influence thinking about food.

- *Norms bind members of a group and serve to guide, control, and regulate behavior.*
- *Families can use concept analysis to identify personal and societal distortions regarding food attitudes and norms. They can use it to reach an understanding about what those norms mean to them.*
- *Concept analysis is the thinking process used to consider the specific meaning of a concept. It is also used to distinguish between two or more concepts that have similar meanings or have an important relationship to one another but have different meanings. Concept analysis involves*
 - ... identifying characteristics of the concept(s) being considered.*
 - ... considering concrete examples of the concepts in everyday life.*
 - ... determining the significance that the concept has in everyday life.*

Directed Activities

In the second module, students explore the significance of food-related attitudes and norms. The directed activities emphasize the family's role in developing these attitudes and show the consequences of offering alternatives. By the end of this module, students should be able to use concept analysis and interpretation of context to clarify the meanings attached to food attitudes and norms.

The popcorn activity will introduce the idea of food attitudes. (See support materials ■ B.1 and ■ B.2 on pages 87 and 88.) After completing the activity, students should understand how society influences people's attitudes toward food.

News report or article. Most students like popcorn; discuss less favorable attitudes toward food after reading an article on an uncommon food practice. See support material ■ B.3 as an example.

A concept analysis of food norms will help students examine how social standards are significant factors influencing the development of food attitudes. Social standards are expectations about what attitudes and behaviors are considered acceptable within a given culture. See support material ■ B.4 for concept analysis instructions and a list of examples and nonexamples (examples that do not illustrate the concept) of food norms.

Summarize the concept of food norms. As a large group, list characteristics and noncharacteristics of food norms. Possible characteristics include that norms vary among individuals, families, regions, and ethnic and cultural groups; norms define appropriate attitudes and behaviors; norms identify what is accepted as food; norms are constantly changing; norms are ideas transmitted through the process of enculturation; norms are part of everyday life; norms are perpetuated by social forces; and norms reflect the values people hold. Possible noncharacteristics include that norms are based on facts or norms are followed by everyone.

Review the concept analysis process. What does one do mentally in analyzing the concept of food norms? How might the process of concept analysis be used in everyday life? Why might it be important to use this process deliberately?

Conceptual Statements

- *When families explore the significance of food in their lives and develop new norms, they use the communicative system of family action.*

Food attitudes and norms vary among individuals, families, and societies.

- *Because food attitudes and norms are closely linked with food-related behaviors, it is important to consider how variations in attitudes and norms may lead to variations in behavior.*
- *The consequences of holding different food attitudes and norms are manifested in many ways and at all levels (individual, family, and societal).*

Directed Activities

A food norms lab, using foods that represent additional examples of food norms, will help students recognize the relationship between food norms and attitudes or behavior.

Assign each lab group a different food to prepare. The foods should represent food norms. Some examples of food norms might include that cake is served at birthdays, teenagers love pizza, or salads are diet food. Require students to follow one or two additional teacher rules during the lab, such as everyone must wear plastic gloves or half the class must wear their hair pulled back.

Before sampling the foods, have students work in their lab groups to answer the questions about each food in the food norms chart, support material ■ B.5. It may be helpful to lead students through one example for the chart before having them work in small groups.

After sampling the foods in a large group, have students discuss answers to the following questions about the chart and the teacher rules during the lab:

- What are some different kinds of food norms and attitudes that individuals, families, and societies hold?
- What are some consequences of having norms and attitudes?
- Are all norms and attitudes appropriate for all people? Explain.
- Are some norms and attitudes better than others?
- Are some norms more basic to human existence than others? Explain.
- What is the relationship between norms and attitudes?
- What happens when norms and attitudes are imposed on others as was done in class? How did you feel about this?

A food norms summary chart and writing assignment. Use this assignment to help students summarize their understanding of food norms. See support material ■ B.6 for an example of a chart and directions for the writing assignment. The sample chart provided in support material ■ B.6 is only one way students might display their knowledge about a concept. Students can use a blank copy of this chart or they can choose another way to display their ideas.

After students complete the writing assignment, they can use a peer review process to evaluate individual work. For example, have students exchange papers in small groups. Provide criteria to use for evaluating the paragraphs. Have students write comments on their group members' papers based on the criteria. Then ask each small group to select a paragraph to read out loud to the class.

Tasting lab. Conduct a tasting lab during which students will encounter variations between individual reactions to familiar and unfamiliar foods. Display a variety of familiar and unfamiliar foods.

▼ *Three current attitudes about food (and the norms regarding acceptable food-related behavior that are connected with them) are of a particular concern to the family.*

Food is an unlimited resource.

- *Taking food for granted may result in unquestioned buying of food based on unclear criteria.*
- *Some people develop excessive expectations about the amount of resources they deserve.*

Food is a means of enjoyment and pleasure.

- *Through the creation of new food forms and food-processing equipment, technology reinforces feelings of excitement and pleasure regarding food.*

► **Teacher note:** Foods used for this lab might include fruits (mango, papaya, Asian pear, kiwi, and star fruit), vegetables (pea pods, red cabbage, leek, alfalfa or bean sprouts, parsnips, Brussels sprouts, spinach, chayotes, and cactus pads), and other foods (tofu, grits, clams, blackened fish). As the students view the foods on display, the teacher may wish to record their reactions for later reference. Teachers may want to have students prepare the foods to be sampled.

As they sample the foods, ask students to record their own reactions using support material ■ B.7. Then, in small groups, have students share their answers to the first four questions and look for similarities and differences between their reactions. Use the following questions to summarize this activity in a large group:

- What did you notice about your reactions?
- What did you notice about the reactions of others?
- What attitudes do you recall having or hearing others express throughout this experience?
- Were there foods that some students would not even try? If so, why not?
- What statements can you make about food attitudes at this time?

Returned Peace Corps volunteer. Read the excerpt from the interview in support material ■ B.8 to stimulate a discussion about the effects of variations in food attitudes on individuals, families, and societies.

The food pill activity is intended to help students identify and examine current food-related attitudes and norms by considering how life would be different if individuals and families consumed food in pill form. The activity builds on the work on determining continuing concerns in module A. Remind the students that developing food attitudes and norms is another continuing concern of the family.

Introduce this experience by setting up an announcement over the school intercom or by having a food pill sample for each student in class (gelatin tablets or sugar substitutes are available in pill form). See support material ■ B.9 for a sample announcement and for additional instructions.

► **Teacher note:** The teacher should think of creative ways of embellishing this experience. For example, teachers can tailor the sample announcement to relate more directly to their school. If a sample pill is provided, teachers may want to tell students to set their tables and that a food will be passed out for them to try without telling the students that they will not need a full place setting.

Conceptual Statements

- *While enjoying food itself is not a problem, it can become a problem when people overemphasize self-gratification.*
- *More problems develop when social distinctions are created between those who can and cannot afford certain types of foods and food-processing equipment.*

Food is a way of maintaining power and control over others.

- *Some people and groups use food as a means of manipulating and controlling others.*
- *When food is used to control others, it serves the interest of just a few people.*

▼ Individuals develop food attitudes and norms in the process of growing up and experiencing life in a particular group.

Enculturation is the process by which food ideas and norms are passed from one group of persons to another.

- *Enculturation begins early in life in the family and continues over time.*
- *It includes both formal and informal instruction.*
- *This instruction takes different forms.*
 - ... *Modeling occurs when behaviors displayed in the family are copied or imitated by others.*
 - ... *Food can be used as a reward. Denial of food can be a method of punishment.*
 - ... *Direct experiences consist of both good and bad experiences, such as being forced to eat everything on one's plate, having allergic reactions, and liking food that tastes good.*

Directed Activities

Another Exciting Day. Have students read this story to introduce them to the process of enculturation (See support material ■ B.10.) Have a large group discussion using the questions included in the support material.

The Hamburger Factor. Discuss the story included in support material ■ B.11 on a cultural transformation of a food attitude. Use the questions included in the support material to help students develop an understanding of enculturation and food attitude changes.

Conceptual Statements

Reasoning about food-related experiences involves deliberate thinking and critical reflection. This may lead to change.

A number of social forces convey ideas, attitudes, and norms.

- *Influential social forces include the family, schools, government, corporations, media, religious organizations, as well as popular culture in which movie stars, athletes and singers are role models.*
- *Some of these are viewed as being more powerful and influential than others in the development of food attitudes and norms.*
- *Recognizing the power of social forces to shape and change food-related attitudes and behavior is important so that individuals and families can play a role in influencing these forces.*
 - ... *Some food norms may not be appropriate or in the best interest for all people in a society.*
 - ... *Individuals and families may choose to follow or deviate from the food norms presented by the more powerful forces.*
 - ... *Individuals and families can exert a positive influence in society by offering alternative attitudes and norms.*

▼ **A combination of factors influence the family's ability to develop desirable attitudes toward food and appropriate norms to guide their food-related behaviors.**

Directed Activities

Social forces display. Introduce the idea of social forces and their relationship to food-related attitudes and behaviors by developing a working definition of *force*. As a large group, ask students to share their answers to the following questions:

- What comes to mind when you hear the word *force*?
- How does it feel to be forced to do something?
- Is the person doing the forcing always in control?
- Give an example of when a force caused you to think or do something.
- What are some forces in society that affect the way people think about the use of food?
- Can forces be positive and negative? Explain.

A picture of a person with several arrows directed toward him or her can help illustrate the existence and power of social forces. Tell students to think of themselves as the person in the picture. Ask them who or what influences their attitudes and behavior in regard to food. Write an example of a force at the end of each arrow. Not all examples that the students give will be social forces. Ask students to look at all of the forces identified and select those that are social forces. Social forces are different from physical or personal forces.

To stimulate thinking about how these social forces might influence food-related attitudes and behavior, present students with a forces display using groups of actual foods or pictures. See support material ■ B.12 for instructions.

New food norms lab. Conduct this lab (support material ■ B.13) to provide students with an opportunity to role-play a social force promoting a new food norm and to participate as an audience in accepting or rejecting the new food norms.

Developing perspective is a cognitive strategy that will help students learn the skills involved in assessing the desirability of food-related attitudes and norms. Introduce this strategy by using the instructions in support material ■ B.14. Be sure to help students grasp the idea that developing perspective involves considering other people's perspectives.

Next, use this strategy as a class, this time focusing on a current food-related attitude or norm. This will help students develop perspective about its desirability. Summarize this experience using the following questions:

Conceptual Statements

A desirable food attitude or norm is one that has been critically examined for worth and for the possible consequences it may have on individuals, families, and societies.

To promote the development of desirable attitudes and norms, the family needs to establish a non-threatening environment so that open dialogue between members can take place.

- *A nonthreatening environment allows family members to share feelings and ideas regarding food.*
- *As they mature, family members should be encouraged to question their feelings, ideas, and reasoning processes.*
- *This process allows family members to examine the complexities of food attitudes and norms and to consider integrating new ideas into those already developed.*

The ability to explore the meaning of ideas also contributes to the development of desirable norms.

- *Exploring the meaning of food norms helps family members clarify distortions.*
- *Understanding the consequences of upholding particular food norms helps families clarify their food attitudes.*

Desirable norms are more likely to develop when family members think deliberately and critically about attitudes, norms, and ideas regarding food.

Directed Activities

- What environmental or personal characteristics affect the process of developing perspective?
- Why is this process important to individuals and families?
- How does this process differ when you do it alone, with a partner, or in a large group?
- Give an example of this process in an everyday situation.

The following activities are intended to help students identify kinds of attitudes that seem healthy and consider ways to develop desirable attitudes toward food.

Conceptual Statements

- *Conscious ideas are those that people are aware of and can articulate to others.*
- *Unconscious ideas are taken for granted, are unexamined, and are not readily verbalized to others.*
- *Unconscious and conscious ideas may be either healthy or harmful.*

▼ Significant questions regarding the development of desirable food attitudes and norms arise in a particular context.

Contextual factors are conditions in the setting that influence the development of attitudes and behavior.

Directed Activities

Defining conscious and unconscious. Begin by developing a general meaning of *conscious* and *unconscious*. Ask students to write two sentences describing these words. Share examples of sentences and discuss what people mean when they use each of these terms. List words and phrases students use to describe their meaning on the chalkboard under each term. Ask them to consider the following questions:

- What does it mean to have a conscious food attitude?
- What are some examples of conscious food attitudes?
- What are some examples of unconscious food attitudes?
- What are some consequences of having unconsciously held ideas?
- Is it possible for people to have unconscious ideas about something at the same time they are consciously thinking about it?

Food attitude scenarios. Use the scenarios in support material ■ B.15 to illustrate how consciously and unconsciously held ideas have consequences. Tell the students that each scenario represents one of the following types of food attitudes: unconsciously held with healthy consequences, consciously held with healthy consequences, unconsciously held with harmful consequences, or consciously held with harmful consequences.

Working in pairs, students can write a new scenario for two of the four types of food attitudes stated above. Each scenario should represent an everyday life experience. When the scenarios are completed, have each team exchange their scenarios with another team. Students should continue to work as partners to answer questions about their new scenarios using support material ■ B.16.

The next set of activities will help students think about the way contextual factors affect the development of food-related attitudes and behaviors.

Defining context. Use the activity and discussion questions in support material ■ B.17 to illustrate the concept of *context* to students. They should determine that context is the setting in which an event takes place and it is made up of many factors. Emphasize in the discussion that conditions or elements might exist that influence people's perception. Some examples include, past experience, location, family, the media, future goals.

Children's story. Use a story, such as *Little Red Riding Hood*, to have students practice identifying contextual factors in a situation and consider the significance of those conditions in relation to the situation. As a large group, list the contextual factors surrounding the situation in the story (for example, where Little Red Riding Hood lived, the reason she went to see her grandma, what she was carrying, the motive of the wolf, and others). Then, have students work in pairs to rewrite the story, changing one contextual factor (for example, Grandma lives in the city, rather than in the woods). Share examples of rewritten stories.

Conceptual Statements

Interpreting information about contextual factors leads to greater understanding of the concerns families have.

— *Families can interpret information about contextual factors by gathering data about the development of particular food attitudes and norms. They can use a number of information-gathering techniques, such as asking questions, observing, and reading.*

— *By asking a variety of higher-order questions and gaining more contextual data, individuals and families gain insight into how their own situation reflects a larger societal concern. Higher-order questions refer to thinking levels beyond memory and factual retention, for example, How do norms held in the family reflect patterns of thinking in society?*

— *Once these higher-order concerns are identified, families can use interpretations of contextual information to set goals for addressing and solving their continuing concerns about food.*

Directed Activities

- How does changing a contextual factor affect the story?
- Does it make a difference, for example, if Grandma lives in the city rather than the woods? How?
- What are some ways contextual factors make a difference in people's lives?
- What are some contextual factors that contribute to the development of food-related attitudes and behavior?

Favorite food lab. This activity will help students examine the contextual factors surrounding a food attitude. Organize the students into small work groups. Have each group select a favorite food to prepare in lab. After selecting its favorite food, each group is to draw a diagram depicting the contextual factors that influenced the development of their attitude toward that food and the contextual factors that reinforce it. (See support material ■ B.6 for an example.) Before sampling the foods, each group is to share its diagram. Ask students to compare the diagrams and respond to the following questions:

- What contextual factors affect food attitudes?
- Why might it be important to identify contextual factors influencing food attitudes?
- How did the diagram help you understand the significance of contextual factors in regard to the development of food attitudes?

Interviews of senior citizens provide another perspective regarding the development of food attitudes and behaviors due to changes in context. This activity builds on previous work on perspective taking and helps students develop their inquiry skills.

Have students prepare for a field trip to a senior citizen center by generating a list of possible questions to ask. (See support material ■ B.18 for a list of possible questions to use for the interviews.) Assist students with formulating their own questions to help them gather information about the seniors' past and present food-related attitudes and behaviors and factors that caused their attitudes and behaviors to change. It may be possible to bring a meal or a snack to the senior citizen center. When coordinating the field trip, ask if bringing food is appropriate and request suggestions. Students could use a lab before the trip to make the food and discuss the kinds of food seniors, as a group, may tend to eat. (An alternative assignment, if a field trip is not possible, might be to have students interview other adults, such as parents, grandparents, relatives, and teachers.)

After the interviews, have students share their findings in small groups. Help them focus the information to share, such as the funniest thing they learned, something they learned that is similar to their experiences with food, or something they learned that is different from their experiences with food. As a large group, have students answer the following questions:

- What contextual factors affected the food-related attitudes and behavior of the persons you interviewed?
- What changes occurred over time in their food-related attitudes and behavior?
- What are some reasons why changes in food-related attitudes and behavior occur?
- Are the changes in food attitudes or behavior always more desirable?
- What makes you think that? Give an example of what you mean.

Talk show. As a way to summarize and review this module, ask students to present the portion of the talk show in support material

■ **B.19.** Be sure to help them grasp the following connections:

- the relationship between developing perspective and understanding other perspectives, and
- use of these intellectual and social processes as strategies for interpreting contextual information about continuing concerns of the family, such as those involved in developing food attitudes and norms.



The Popcorn Activity

Directions to teacher: The popcorn experience should take place at the beginning of a class period. Have popcorn popping as students enter the classroom. Share the popcorn with students. As they eat, ask them to respond to the following questions in their small groups and write their answers on newsprint:

- What thoughts went through your mind as you (a) entered the classroom, (b) smelled the popcorn, and (c) tasted the popcorn?
- When do people eat popcorn?
- Why do people eat popcorn?
- Why is popcorn a common snack?

Post newsprint on the wall. As a large group, look at the ideas on the newsprint. Summarize the ideas about popcorn using the following questions:

- What seems to be the general attitude the class has toward popcorn?
- Do you think the attitude about popcorn held by families and society in general is similar to the one held by this class? Explain your thinking.
- How do you think these attitudes toward popcorn came to be?
- What are some factors that influence and reinforce people's attitudes toward popcorn? (See support material ■ B.2 for a reading that can be used to further develop answers to these questions.)
- What is an attitude?
- Are all of people's attitudes toward food positive? Why or why not?

Our Wonderful Gift from the Indians

By Barbara Williams. Reprinted with permission of the author from pp. 13-16 *Cornzapoppin'!* (Holt), copyrighted 1976 by Barbara Williams.

Many people assume popcorn is regular sweet corn that has been treated in some way to make it pop. Actually, there are three main varieties of corn—sweet corn, which is the kind you eat as a vegetable for dinner; field corn, which is fed to hogs and cattle; and popcorn, which is a favorite snack of many Americans. Of the three kinds of corn, popcorn is the only one that bursts into a delicious white morsel when exposed to high heat. Scientists assume that the popping results from a combination of the hard shell and the internal moisture of the popcorn kernel.

Most of the world's popcorn is grown in the Midwest, principally in Nebraska, Iowa, and Indiana, where it can get mighty hot in the summer. Old-timers tell of one particular summer when it got so hot, the corn in the fields started popping right off the stalks. The cows and pigs thought it was a blizzard and they lay down and froze to death.

Tragedies like that do not happen very often, however. Popcorn is usually associated with happy events like baseball games, movies, Christmas, Halloween, and family gatherings around the television set. Americans love popcorn. It is cheaper than candy, less fattening than potato chips, easier to prepare than cake, sturdier than ice cream, and more American than apple pie.

Popcorn, in fact, is one of the oldest truly American confections. Archaeologists claim popcorn was the first crop ever grown by the American Indians. The Indians knew about popcorn even before they discovered sweet corn. For nearly six thousand years—long before the time of Jesus or even Confucius—Indians popped, ate, and even wore the tasty white flowers that burst mysteriously from the hard kernels. When Columbus landed in the West Indies in 1492, he encountered Indians selling jewelry made of popcorn. A few years later, Cortez invaded Mexico and found the Aztecs using popcorn ornaments in their religious ceremonies. But of course the best use for popcorn is to eat it.

The Indians had no electric corn poppers, no gas ranges, not even any cast-iron skillets. But they developed several methods of popping corn. The easiest was to insert the end of a long stick in an ear of popcorn and hold it over the fire. Occasionally the kernels would pop off the cob and into the fire, the way modern campers sometimes lose their wieners and marshmallows.

Another way Indians popped corn was to throw loose kernels directly into the fire. When the heat of the fire caused the kernels to burst, the popped corn would usually fly out of the fire and onto the ground where it could be picked up. This method caused a good deal of needless scampering and bending, so eventually many Indian tribes adopted the more practical hot sand method of popping corn. People in these tribes would pour a layer of sand into a large clay vessel and then put the vessel over the fire until the sand became very hot. Then they would remove the vessel, pour some kernels of popcorn into the hot sand, and stir the sand with a long stick. As the kernels popped, they would spring to the surface for easy removal.

The Indians were generous in teaching the white settlers about popcorn. Soon the colonial women were serving their families "puffed" corn breakfast cereal with sugar and cream. And better implements were devised to pop the intriguing kernels. Eventually, the mesh shaker was developed. The shaker often wearied the person on the end of the long handle who had to shake the kernels constantly to keep them from burning. In about 1930 a new type of family-sized corn popper was invented. It plugged into an electric outlet but still required constant manual rotation of the kernels by means of a handle on the top of

the device. It was another ten years before popcorn lovers discovered the kernels needed little or no rotation if oil was added to the bottom of the pot. After World War II hand cranks disappeared from family-sized electric corn poppers.

Popcorn sales took a sudden rise twice during America's history. The first time was during the Depression of the 1930s when Americans realized how inexpensive popcorn was compared to other snacks. Inventors of commercial corn poppers began installing their machines in theater lobbies, and the popcorn and movie industries developed together.

After World War II, popcorn sales again made a sudden rise—this time by an astonishing 500 percent! A survey conducted among housewives proved the reason was the invention of television. As families started buying television sets, they were changing their lifestyles—staying home more and eating popcorn as they watched their screens.

Despite how delicious and inexpensive it is, popcorn is not really popular today in countries other than the United States, Canada, and Mexico. Although small amounts are consumed in Australia and South Africa, popcorn seems to be a snack only Americans enjoy regularly.

Note to students: Many people know American Indians first developed popcorn, but they may not know Indians also developed many more important foods, including potatoes, tomatoes, peppers and cocoa. Some anthropologists estimate 60 percent of the foods commonly eaten in the world today were first cultivated by the people who lived on the North and South American continents prior to Columbus' landing in 1492.

Indian Givers by J. Weatherford (1988) details Native American contributions to the world's dinner table. Chapters 4, 5, and 6 deal specifically with the history of food.

Winning the Rat Race in India

By Zai Whitaker. Copyrighted 1992 by the National Wildlife Federation. Reprinted with permission from *International Wildlife* magazine's November/December issue.

Dust Hangs in the hot still air as Raman, his back gleaming with sweat, immerses himself in his work. The wiry Irula tribesman is plodding through a rice field near Madras in southern India, scrutinizing a vast network of tunnels carved out by hundreds of burrowing rats.

He creeps toward a burrow, eyes down, then lunges toward a darkened opening. Dirt flies everywhere during the scramble as he snatches a fat female rat by the back of the neck, expertly avoiding the animal's long, curved, brown-stained incisors. To keep the rat from biting or chewing its way free, Raman hooks its tail behind its lower teeth and, with a flick of his finger, snaps them off.

He plops the animal into a bag his wife, Lakshmi, is holding, then thrusts his arm back in the tunnel up to his shoulder. In seconds, face beaming, he holds up another prize, a half-grown juvenile. "Should be eight of these, at least," he says, then, sure enough, proceeds to pull out seven more of the furry pests, one by one.

If the world wants a better mousetrap it should beat a path to Raman's door. A rat catcher all his life, he knows his rodents. And that kind of knowledge goes a long way in a land where, every year, swarms of Indian mole rats, rice rats, gerbils and field mice steal almost a quarter of all stored and standing grain—enough to feed the country's 900 million people for three months.

Elsewhere, farmers battle rodent pests with an arsenal of deadly chemicals that also poison people and the environment. Raman's methods—which, as it turns out, also produce meat for his family—are environmentally benign and even more efficient, suggesting there may be a bright side to an otherwise grim and desperate struggle.

Chingleput District, home of the Irula tribe, was once a vast forest dominated by thorny acacias and teeming with such spe-

cies as black buck, axis deer, wild pigs, and leopards. But in recent decades, growing numbers of people moving through the area have drastically altered the habitat, hacking down the forests and decimating the wildlife. Today, what isn't irrigated farmland is largely desert, with islands of scrub overrun by mesquite and other weeds.

Such conditions are ideal for rats. Not so for a tribe of 28,000 nomadic hunters once known for their knowledge of the forest. Most Irulas still survive by collecting edible roots, berries, and nuts. They fish where they can and continue to go after small prey like mongooses, monitor lizards, and the occasional hare. Fortunately, they have turned their hunting prowess to advantage in recent years. Like Raman, many of them have become India's master rat catchers.

Years ago, the Irulas earned a reputation (and a living) as snake catchers. They caught cobras, rat snakes, and other large serpents and sold them to the snakeskin industry. In the mid-1970s, the government banned the trade, so a group of Irulas started the Snake Catchers Cooperative Society and began extracting snake venom for antivenin production. A few years ago, about 75 organized themselves into a team of rodent busters called the Rat and Termite Squad (RATS). Their mission: to search fields and destroy crop-eating rodents.

In terms of biomass (the combined weight of a group of animals in an area), rats are as abundant as cattle in India, and they multiply at a dizzying rate. A female has perhaps ten young at a time and can produce as many as seven litters in one year. People inadvertently help the creatures by converting forest and grassland into rice fields, which supply all the food, water, and shelter a rat could want.

In return for this hospitality, the rodents have brought destruction of staggering proportions. Every year, tea estates and fruit plantations in India lose crops worth millions of rupees to rats and the

erosion that follows devastation of farm fields. A recent (and expensive) short circuit at the nuclear plant near Madras was sparked by a rat with a taste for wire insulation.

The average rat can gobble almost an ounce of rice per day, and that adds up quickly in areas teeming with the animals. During a recent infestation in the state of Rajasthan, for example, a single acre swarmed with as many as 400 rats, which consumed nearly a ton of rice in three months.

Enter the Irulas, whose generations-old knowledge of rodent natural history makes them the most efficient rat catchers ever. For them, the importance of the hunt is twofold: Where else can you rid your fields of a nuisance animal and shop for dinner at the same time?

It takes a lot of rats to feed a hungry family. Some Irula chefs curry the animals and eat them with rice, while others simply roast them on an open fire. A hunting party might fire up a spontaneous barbecue if hunger hits on the way home. To the Irula way of thinking, rats are just another game animal. Nothing repugnant about them. (But you'll never see an Irula eat frog legs or, for religious reasons, beef.)

The Irulas' knack for nabbing rodents is something to behold. One February morning, a tribesman named Anamalai and his family got together with others from the RATS team for a day of ratting on a 5-acre spread of rice fields. Work began at eight o'clock. By noon, their bags were bulging with 242 jumping, squeaking gerbils, mole rats, and field mice.

Because the Irulas manage to catch such an amazing number of rats—and without a speck of chemicals—the Oxfam Trust (an international aid organization) decided to fund a pilot project to pay them to do what they do best. In 50 hunts, the catchers nabbed several thousand rats at a cost of about 1.50 rupees, or 5 cents (U.S.), per animal. In parallel trials elsewhere in the country, the per-rat cost using pesticides was 14 rupees, or about 50 cents.

Officials with India's Department of Science and Technology were so impressed with the feat that they granted the RATS team 750,000 rupees (\$27,000 U.S.) for a

three-year rat-extermination program. During the first year, Irula ratters combed fields and farmlands of Chingleput District, catching the animals alive by hand or whacking them with sticks as they ran out of their burrows. The bounty: more than 98,000 rats.

One overcast morning finds Raman and Lakshmi and two other Irula couples walking along the muddy bunds, or mounds, in a 10-acre rice field. The ripening stalks are aglow with vivid green, the morning air filled with the calls of bee-eaters, meadowlarks, and a pair of noisy rollers flashing their electric-blue wings. On the far edge of the flooded paddy, a white-breasted kingfisher lands with a splat, skewering a fat paddy frog. The shrill cries of two spotted owlets burst from the crown of an elegant black palmyra, while large male garden lizards lazily make their way to sunny basking spots. It's harvest season, the time when the rodents really take over. Tension grips the air, a feeling that always accompanies the hunt—even for rats.

Clipboard and pen in hand, Gopal, the RATS team supervisor, confers with the catchers on strategies for the attack. Then, while village women harvest rice from the edges of the field, the rat men and their wives begin work at the threshing platform.

Raman walks over to a halfdozen gerbil burrows, kneels and studies the brushlike marks in the sand made by furry tails. With a few artfully aimed blows of his crowbar, he exposes a section of one tunnel, then scrapes a bit of the earth onto his palm. He solemnly points to a few light-colored hairs and some lice, which always occupy rats and their homes.

Then the catchers string out nets in a big ring around the holes. While the men dig, the Irula women poke the ground with sticks a couple of yards away to find the animals' escape hatches. Gerbils typically dig a secret burrow within an inch or so of the surface. If a rat snake or other predator enters the burrow, the rodents break through to the surface and skip out the back. Once these exits are located, the wives lay small sock nets over them.

Work stops for a moment after a flurry at one hole, where an 8-inch black scorpion has bumped into the stark sunlight. Work-

ers stand back and allow the creature to proceed past bare toes into the shade of a thornbush.

Suddenly—more action, and from every direction. Two adult gerbils dash out of their holes and straight into the nets. Raman has another in his hand, and two other Irulas have scooped up bunches of young ones. The women are busy with several rodents bouncing around in the sock nets. That makes a total of 14 gerbils, the rodents with the most highly esteemed meat. But the greatest challenge lies ahead: breaking up the mole-rat colony that has been multiplying apace as rice plants mature and making serious inroads into the growing grain. After a quick consultation in Tamil, the team gets to work on the grass-and-earth bunds.

Village women in colorful saris continue harvesting, kicking up the rich scent of ripe grain and paddy straw as the rat busters descend on the main tunnel system. In a moment, a rat catcher named Murugan calls for a group of visitors to come have a look. Reflecting sunlight off the shiny blade of his crowbar, he illuminates the dark interior of a rat hole. Lying inside is the tightly coiled body of a medium-sized rat snake. Murugan nods meaningfully toward the women, then pokes at the snake, which shoots out of the hole and into the rice stands, drawing shrieks from the harvesters. Murugan smiles at his prank, then goes back to work.

In a burst of furry energy, a half-dozen or so rats dart for cover. Irula women dispatch some of the escapees with accurate blows from the thin, flexible sticks they carry. But in a maze of diabolically designed burrows and escape routes such as this, a rat hunt can quickly turn into a comic nightmare, with rodents popping out everywhere and fleeing into nearby bushes. Strong measures are in order.

Raman takes two clay pots and, with a sharp stick, punches a small hole in the bottom of each. He fills them with dry grass and leaves, then inserts a burning twig to start them smoldering. Using strong lung power, two of his comrades soon have the pots billowing smoke. They carefully align the pots over two of the main exits of the burrow system, pack dirt around them to make an airtight seal, then

blow smoke into the rodent hideouts. In a moment, wisps of smoke circle up from cracks along the bund like a range of smoldering miniature volcanoes.

Then they wait. Raman and the other men light up strong, leaf-rolled cigarettes called "beedis" while the women huddle and talk softly. In a few minutes, the men again take up their crowbars and start digging. Limp carcasses of rats, asphyxiated by the smoke, pile up on the bund. After a while, the workers excavate and measure the burrow system, then tally their harvest: 27 mole rats from nearly 100 feet of tunnels.

Raman scoops handfuls of rice from three nest chambers, which double as granaries for the hording rodents. In all, he and his mates recover about 11 pounds of rice from the rat burrows. Not long ago, Irula rat man Chockalingam and his wife returned from a hunt in millet fields lugging a gunny sack stuffed with nearly 15 kilograms (33 pounds) of the food grain hidden underground in rat granaries.

Back at home, the rat patrol hands over its catch and its report on the hunt to program managers Dravidamani and Shymala. Most of the rodents will be sold to the Madras Crocodile Bank, where mugger and saltwater crocodiles, among other species, will feast on the Irulas' labors.

As the sun begins to sink over the Bay of Bengal, visitors who got over their squeamishness long ago join tribespeople as they gather round a fire in front of an Irula hut. A transistor radio blares from Vadanemmeli village not far away, but the sound is not too loud to drown out the chorus of yapping jackals looking for crabs and turtle eggs on a nearby beach. Darkness settles in as the aroma of sizzling meat wafts to your nostrils and you reach, with pleasure, for another roasted rat.

Questions

After reading the article, answer the following questions:

- What is the general attitude the class has toward this food practice?
- Why is your attitude toward this food practice not as positive as your attitude toward eating popcorn?
- Why do people from other cultures have a positive attitude toward eating rats?

Concept Analysis of Food Norms

Directions to teacher: The activity below is based on Jerome Bruner's concept attainment model. *Strategies for Teachers*, by Paul Eggen and Donald Kauchak (1988), and *Models of Teaching*, by Bruce Joyce, Marsha Weil, and Beverly Showers (1992), provide more information about Bruner's model.

1. Provide examples and nonexamples of the concept, food norms.
2. Tell the students that you have a concept in mind.
3. Tell the students their task is to determine what the concept is using the *yes* and *no* examples. Indicate that the concept is represented by the *yes* examples.
4. Present the examples and nonexamples one by one, indicating which ones are *yes* and which ones are *no* examples. Begin with a *yes* example. Adapt the list of examples and nonexamples of food norms to reflect your local community, adding one or two local norms so that students can recognize the existence of norms at a personal level in their own lives.
 - (yes) In some parts of the world, people believe it is best to be fat because weight signifies wealth and status.
 - (yes) Catholics should eat fish on Fridays during Lent.
 - (no) Orange juice provides vitamin C.
 - (yes) It is OK for adults to drink coffee, but children should not.
 - (no) Green beans taste better than yellow beans.
 - (yes) Most people in the United States do not think of insects as food.
 - (yes) An appropriate award for good behavior is a sweet treat.
 - (no) It would be OK to serve hot dogs and potato chips at a formal dinner party.
 - (yes) Everyone should have a birthday cake on their birthday to properly celebrate the occasion.
 - (yes) Popcorn is a good snack when watching a movie.
5. Keep asking the students to think about what the *yes* examples have in common.
6. If one student comes up with the concept, wait until several other students have tested that concept.
7. After the concept has been identified, ask the students to give additional examples and nonexamples.
8. Ask students to reflect on the thinking process they have used during this activity by responding to the following questions:
 - What were you thinking of when you said _____?
 - Why did you come up with the concept of _____?
 - Why did you change your idea?
 - Why did you eliminate your other concepts?
 - What did you think of when I told you to compare the examples?
 - What made you suggest that concept?
 - What finally helped you to get to the concept?
9. Ask students to give a new *yes* and a new *no* example of the concept.
10. Have students work in small groups to develop a list of descriptive words and phrases that are characteristics of the *yes* examples and of the *no* examples.

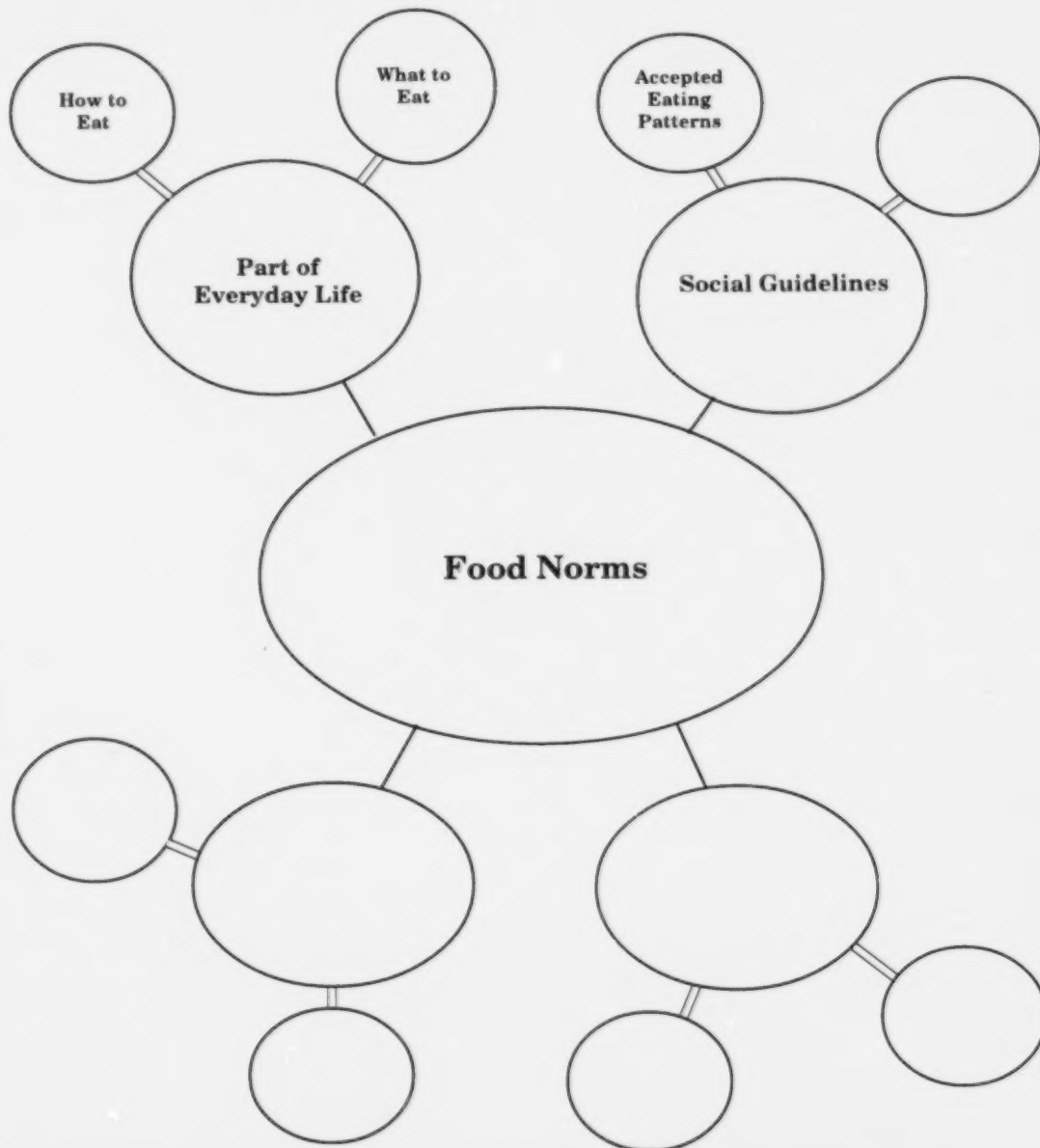
Food Norms Chart

Directions: Record the foods from the food norms lab and answer the related questions.

Foods	What comes to your mind when you think about this food?	What are some specific reasons why this food is eaten?	What food norms does this food represent

Food Norms Summary Chart

Directions: Summarize your thoughts about food norms by completing the chart below. Use words and phrases that come to mind when you think about food norms.



Using the words and phrases from your summary chart, write a paragraph summarizing thoughts regarding food norms. A well-written paragraph includes complete sentences, opening and closing statements, and clearly stated examples to support ideas.

Tasting Lab

Directions: As you taste the foods displayed around the room, complete the chart below. Then in your small group, answer the questions that follow.

Name of Food	Have you eaten it before?	What is your reaction to this food?	Why did you react this way?

Questions

- Which three foods did you like the most?
- Why did you like them?
- Which three foods did you like the least?
- Why did you dislike them?
- How were your thoughts and feelings about these foods similar to your reactions to the popcorn?
- How were they different?
- What factors influence a person's reactions to food?

Returned Peace Corps Volunteer

Excerpted from "Culture Shock" by George Yvelich. *Isthmus* January 19, 1990. Reprinted with permission.

Directions to teacher: Read aloud this excerpt from an interview with Nick Voichick, a returned Peace Corps volunteer:

"Actually, I got so I could eat caterpillars. People in Zaire eat a lot of insects. Flying termites they eat raw. Other insects they boil up in a little saltwater. In fact, I brought some cooked grasshoppers back and my friends ate them....

"I remember when a village family had me over for dinner. They serve everything in covered dishes. The man set a dish in front of me, smiled politely, lifted the cover and there was a little dead mouse. It was on its back, feet up, hair charred off by the fire. The family was very polite, and so was I. Yes, I did have a little bit of the mouse."

Questions to Ask Students

- What thoughts went through your mind as the teacher read this excerpt?
- What are some reasons for your reactions?
- What food attitudes do the people in Zaire hold that differ from North American food attitudes?
- When have you had an experience similar to that of the Peace Corps volunteer (for example, perhaps eating at a friend's house)?
- How did you react?
- How would you react if you had been in a similar situation?
- What do we offer guests in our homes that they may not be familiar with or like to eat?
- What are some examples of contrasting food attitudes and norms between families or within families (for example, different religions and nationalities, one family member on a diet while others are not, vegetarians)?
- What new information have we learned about food attitudes?
- Why do some individuals, families, and societies have different food attitudes than others?
- What are some consequences of having different food attitudes?

Food Pill Activity

Sample announcement over intercom

Attention! Attention! We have just received notice from the U.S. government that a new technological breakthrough has made a blue life pill available. This pill provides all the nourishment one needs in a day and will be available immediately.

Directions to teacher: After using either the sample announcement or some other means to inform students about the food pill, ask them to share the thoughts that came to their minds when they found out a food pill would replace all the foods they currently eat. Discuss reasons why a food pill might have been developed. What food-related attitudes or norms do people currently hold that might make the food pill a necessity? To help students think more thoroughly about the impact of food pills, have them work in small groups to complete an impact chart on newsprint. (For an example of an impact chart, see support material ■ A.13) Have each group use a different question about the food pill in the center of their chart. Suggested questions include the following:

- How would having a food pill change your life?
- How would families and societies throughout the world be affected by having food pills?
- How would having food pills change relationships between individuals?
- How would having food pills change relationships between families and between societies?
- How would having food pills affect us physically? Socially? Emotionally? Economically? Environmentally?
- How would the production and distribution of food pills be different than other food?

Post the impact charts so that all students can see them. Have each small group briefly share highlights of the impact chart they developed in response to the questions. Next, have each student write for ten to fifteen minutes about this new development, considering the ideas presented in the impact charts and their own reactions. Collect students' papers and redistribute them so that each person has someone else's paper. Tell students to read the paper they have been given and write a response to the classmate who wrote it. Students should

- identify the ideas with which he or she agrees or disagrees,
- suggest other ideas that should be considered,
- respond to questions the writer may have, and
- share ideas she or he has that relate to or are different from the writer's ideas.

Return papers to their original owners. After reading the response to their writing, have students identify one or two current food-related attitudes or norms reflected in the paper and responses regarding food pills. As a class, develop a list of current food-related attitudes or norms that are of concern to individuals, families, and societies.

Another Exciting Day

As I woke up, I stretched and felt the sun on my back. I pulled Bunny under one arm and Monkey under the other arm. I turned my head and gazed at the pattern of my quilt. After a few minutes, I decided it was time to stand up and pull back the curtain and check the trees outside. As I did, the crib squeaked and I let out a squeal. That usually brings Dad into the room. Sure enough, he came in, said "Good morning," and changed my diaper. I helped dress myself and even picked out some socks. "It's time for breakfast," he said.

Mom placed the usual flakes in a bowl with some milk and put the bowl and a cup of juice on the table in front of me. We talked and ate together until the juice and cereal were gone. I picked up my bowl and began drinking the last few drops of milk. "Why did you do that?" Mom asked. "How did you learn to get the milk out of your bowl that way?"

I tried to tell her but she couldn't understand. I told her Dad drinks his milk that way and I decided to try it, too. It's easier than scooping the milk out with a spoon.

After breakfast, we put on our coats and shoes. Dad took me to preschool. The teacher keeps talking about this big word "sharing." I am trying to learn what it means. I noticed my friend was coloring a picture and that looked like fun. I walked over, took a crayon, and started drawing. My friend wasn't happy and started to cry. The teacher came over and told me to ask my friend if I could use a crayon. Or, she said, I need to wait until no one is using the crayons. I told her I just wanted to color a picture too. She showed me a set of blocks. I played with those until Mom picked me up from preschool.

Then we went grocery shopping. As we passed the bakery counter, I pointed to the cookies. Mom agreed. She said I could have a cookie, but I couldn't eat it until we were done shopping. And she said I had to be good while we shopped or I couldn't eat it. That was the longest grocery shopping trip ever. I wanted to grab all of the food. But that cookie looked even better.

After we returned home and put away the groceries, we ate lunch. We ate peaches, bread with peanut butter, and milk. I ate the peaches first and wanted more. Mom said I had to drink some milk and eat some of the peanut butter bread before I could have more peaches. I don't always understand. Before she used to tell me to eat my peaches. I guess I have to eat everything first, and then I can have seconds. While Mom waited for me to wash my hands on the warm washcloth, I noticed that she threw the leftover food in the garbage can.

After lunch, I took a nap with Monkey and Bunny. I felt refreshed when I woke up and ready to play. After a while, I felt hungry and walked into the kitchen. I noticed some cookies, and Mom let me have one. I took it into the living room and ate it as I played. When the cookie was gone, I wanted another, but Mom said I could only have one now and one for dessert after supper. She said I could have raisins and juice if I was still hungry. I agreed, took the snack into the living room, and continued playing. After a while I took the bowl of raisins and walked into the bathroom. I spilled the raisins into the garbage can. Mom came in and asked what I was doing. She seemed angry, and I tried to tell her I was finished eating raisins and was just putting them away like she did with the lunch food. She didn't seem happy. She took me to the living room, and we read some books.

When Dad came home we ate supper. I got ready to sit in my chair, but my parents said we were eating in the living room. We didn't even use plates. We were eating pizza. I was confused. I can't figure out when I eat in the living room and when I eat in the kitchen. It has something to do with how many people are eating, who those people are, and whether or not we use plates. Grown-ups can be very confusing. I decided to get back to eating pizza when I noticed an unfamiliar object on top of my piece of pizza. I poked at it. It was

soft and grayish brown. Dad said it was a mushroom. He ate them and said I should try one, too. It looked so shriveled and yucky, but I put it in my mouth. I wasn't sure if I liked it. I swallowed it and finished my piece of pizza. The next piece had one of those mushrooms on it, too, so I poked at it again. I guess they weren't too bad.

Supper ended and we played a while. Then it was bath time and time for bed. It had been another exciting day.

Questions

- What food-related attitudes is the child in the story learning?
- In what ways is the child learning each of these attitudes?
- How are food attitudes developed? Give an example of a food attitude that you learned from your family.
- How did you learn this food attitude?

The Hamburger Factor

By T.R. Reid. *The San Francisco Chronicle*, 7 February, 1993, Sunday Punch section, p. 6.
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Tokyo—Here's another stereotype about Japan you can toss into history's trash can. Those "little Japanese" aren't so little anymore.

The rapid westernization of this traditional Asian society has brought such major changes in diet and lifestyle that Japanese people have experienced one of the fastest collective growth spurts ever recorded, according to public health officials.

In the last 30 years, the height of the average Japanese male has gone up nearly four inches while average female height has increased about 2.7 inches. The average 20-year-old Japanese man today is 5 feet 8 1/4 inches, according to data released in January by Japan's Health and Welfare Ministry. That is about the same height as European 20-year-olds.

The last U.S. survey, in 1976-80, found 20-year-old males averaged 5 feet 9.7, an inch taller than the figure for 20 years earlier.

If today's Japanese 10-year-olds continue the current growth pattern, as is likely, they will be just about as tall and weigh just about as much as their American peers when they graduate from high school in 2000, health officials here say.

Public health experts cite several reasons for this dizzying change in the stature of an entire nation. But if you had to explain the transformation in a single word it would probably be hamburgers.

If it is true that you are what you eat, the Japanese are much more westernized people than most Americans may realize.

The fundamental change in the Japanese diet is visible every day at noon in every Japanese city, as people turn away from the traditional lunch of rice balls wrapped in seaweed to form long lines in front of places like McDonald's and Kentucky Fried Chicken, which now rank as the No. 1 and No. 2 most popular restaurants in Japan.

On residential streets every evening, the familiar delivery men carrying traditional rice and noodle dishes are being shouldered aside by fleets of bright red motorcycles bearing names like Domino's, Shakey's, Pizza-La, and Trump's Pizza and Tacos.

"The chief reason for the increase in body size is almost certainly diet," said Nobumichi Sakai, director of the Nutrition Branch at the Health and Welfare Ministry. "The dominant pattern of Japanese dietary change since World War II has been westernization. Grains, particularly rice, have declined in importance, and the caloric intake from animal foods has increased sharply. Meat and dairy consumption has gone way up."

"This is one of the mysteries of Japan," Sakai continued. "Once we decide to do something, all over the country, everybody does it."

In addition to obvious differences—people on the street are taller and bigger—the new Japanese diet is changing in public health patterns. Officials can now see the beginning of an obesity problem among children, although the figures are far lower than in the West. Some forms of cancer previously unseen here are becoming more common.

However, the increase in meat consumption has not led to serious problems with heart disease, according to the Health Ministry. Japanese fat intake is about 25 percent of total calories as opposed to 35 percent in the United States.

Another factor making the Japanese taller, according to the Health Ministry, is that Japanese people today commonly sit in Western-style chairs at home and work, instead of kneeling on rice-straw mats as they did for centuries. "This has ended the constant pressure on the knees of Japanese children, and they grow up to be taller people," explained Masatoshi Hara of the Health Ministry.

Questions

"The Hamburger Factor" describes a cultural transformation. Using the story, answer these questions.

- What change in eating patterns is described in the story?
- What evidence is given that the change in eating patterns affects people's health?
- List some health effects that could be considered good and some that could be considered bad.
- What factors have contributed to the change in eating patterns in Japan?

Social Forces Display

Directions to teacher: Create a display using groups of foods that represent various social forces. Examples of items that could be used for the display include the following.

Religious Culture—Friday fish fry promotion, statements about Catholics fasting during Lent, Kosher food recipes, articles about Muslim food practices that prohibit eating pork.

Popular Culture—A cereal box, a pop can, a diet drink or other diet product, a promotion by a television star.

Government—Commodities (for example, cheese, dry milk, rice), a listing of food stamp program restrictions on Women, Infants, and Children program recipients, a Food and Drug Administration announcement, school lunch program policy.

Educational Institutions—A food pyramid worksheet, a school lunch menu, an apple, a carton of milk, or a picture of a culinary art display.

Ask students to look at each group of foods and try to identify the social force that it represents. Next, have students form small groups and develop an impact chart on newsprint for a different social force. (For an example of an impact chart, see support material ■ B.6.) Use the following questions to stimulate a discussion about the power of these social forces to shape and change people's food attitudes and behavior:

- What do these social forces have in common?
- How do they differ?
- On what aspects of people's lives regarding food do they have the greatest impact?
- What are some specific examples of food-related attitudes or behaviors that these social forces have developed or influenced?
- Which social forces do you think are more dominant than others?
- In whose interest are these social forces acting?
- Why might it be in people's best interest to be influenced by some social forces?
- Give an example of when it might be in people's best interest to be influenced by a social force.
- Give an example of when it might not be in people's best interest to be influenced by a social force.
- What factual statements can you make about social forces? How do you know they are accurate?

New Food Norms Lab

Directions to teacher: Have the students form small work groups. Tell students to work together to create a new food norm, prepare a food representing this norm, and promote the new food norm to the class from the perspective a particular social force, such as the media, business and industry, or government. The new food norm may be a new attitude, such as spinach tastes great; a new food, such as those tried at popular fast food restaurants; or a new practice, such as a change in meal pattern. Assign each group a different social force to represent in creating a food norm and presenting it to the class. Encourage students to be creative in the means used to make their presentations. (Individual teachers need to take into consideration what guidelines and lab plans are appropriate for their classes.)

After the lab, ask students to think about the following questions during each of the presentations:

- How powerful do you perceive this social force to be?
- What values does the norm being promoted reflect?
- Is this a norm that you would accept or reject?

After the presentations, answer the following questions as a large group.

- What did you take into consideration when creating and promoting a new social norm?
- What are the characteristics of a new norm you would be willing to accept?
- Were there some norms presented that you would be willing to uphold?
- Which norms would you reject? Why?
- What is your reaction to social forces at this time?

Developing Perspectives

Directions to teacher: Use the following three-part activity to help students learn the skills involved in the cognitive strategy of developing a personal perspective.

Part 1

- Act out an internal argument. The teacher can argue with himself or herself about giving an assessment or grades, recycling, eating a certain kind of food, or making mistakes.
- Ask students to think about questions that come to mind during the argument.
- Ask students to review what they observed during the argument (for example, the teacher presented all sides of a perspective, identified consequences and alternatives, and recognized errors in thinking).
- Encourage students to share any questions they have about the process and ideas they heard.

Part 2

- Discuss the process of developing one's perspective using the following questions:
 - How would you describe this process?
 - What happens during this process?
 - When does it take place?
 - Why might individuals and families want to develop their perspectives?
 - What happens when individuals and families share their thoughts with others?
 - How does the environment in which this process takes place affect the development of perspective?
- List the answers to the following questions on the board.
 - What are some characteristics of an environment that is conducive to developing perspective (for example, it is nonthreatening, includes people who actively listen, stimulates thought and discussion, and accepts everyone's ideas)?
 - What are some personal characteristics that facilitate the development of perspective (for example, the ability to be insightful, a willingness to share ideas, open-mindedness, fair-mindedness, reflective and critical thinking)?

Part 3

Working in pairs, students should practice developing perspective using a food-related attitude or norm (for example, people do not have to worry about diet and disease until they are older, or people should send money to starving children). Tell students to keep in mind the characteristics listed on the board that promote this process. Also, instruct them as to the partner's role (for example, to question meanings, question reasoning, suggest alternatives, check for understanding, and identify possible errors in thinking). After these discussions are completed, ask students to share what they have learned about their own perspective during the process of learning about the cognitive strategy developing perspective.

Food Attitude Scenarios

From *Minnesota Secondary Home Economics: Food and Nutrition Curriculum Examples, 1986*. St. Paul, MN: Minnesota Department of Education. Used with permission.

Directions to teacher: Read each scenario to the students and have them identify which type of attitude each represents.

Unconscious—harmful

Ron walked to the vending machine, deposited his 60 cents, and carried the soda pop outside as he usually did after lunch. He was joining some friends on the school lawn in order to discuss their plans for the weekend. Later after school, Ron felt thirsty and in anticipation of the long, hot bus ride home bought another can of soda pop. As he entered the kitchen, his dad was drinking lemonade and asked if Ron would like a glass, too.

"No," said Ron. "I just finished a soda."

His dad asked, "How much soda pop do you drink in a day?"

"I don't know," said Ron. "Whenever I am thirsty, I just buy one from the vending machine or get a can from the refrigerator."

"Well, that vending machine soda must cost a lot of money, doesn't it?" his dad questioned.

"Sixty cents," Ron answered. "Talk to you later, Dad, I want to go to my room and listen to a CD."

Unconscious—healthy

Julia's family has always enjoyed raw vegetables with their meals. In fact, they tend to eat lots of fresh fruits and vegetables for snacks and in place of desserts. In the summer her dad prefers the garden-grown vegetables over the canned varieties from the store. In the winter they purchase fresh vegetables from the supermarket.

Julia's friends often ask her how she has so much energy. She replies, "Oh, I don't know."

Conscious—harmful

At school Jennifer learned that eating too much sugar can have bad effects on her body. She had heard similar reports on television, and of course, her parents were always telling her to quit drinking so much soda pop and eating so many sugary foods. Despite her awareness that too much sugar was not healthy, Jennifer continued her familiar eating habits.

Conscious—healthy

The Johnson family became aware that their local landfill was becoming overextended. The city passed an ordinance requiring the collection and recycling of certain containers and waste products. At first the Johnsons wondered if all this was necessary because of all the inconveniences involved in recycling. But they did begin to separate their aluminum cans and their newspapers from the rest of their garbage. Eventually, they began to question the necessity of the packaging from purchased food products. As time went on, they began to deliberately purchase products at the supermarket with recycling in mind.

Discussion Questions

- What is the behavior in each scenario?
- What is the attitude that is influencing the behavior in each scenario?
- What might be some consequences if this attitude or behavior continues?
- Do all conscious attitudes result in healthful behavior? Explain your thinking and give an example of what you mean.
- Do all unconscious attitudes result in harmful behavior? Explain.
- What kinds of food attitudes and behaviors seem to be the most desirable?

Directions: Working with a partner, answer the following questions about each of the scenarios you have received from another group.

- What attitude is influencing the behavior described in this scenario?
- How and why do you think this attitude or behavior developed in the first place?
- What might be some of the consequences of this attitude or behavior if it continues?
- If you had a chance to speak to the person(s) in the scenario, what would you say to them about their attitude or behavior?

Defining Context

Directions to teacher: The first part of this activity requires students to develop a working understanding of *context*, while the second part establishes a more concrete definition of the concept.

Part 1

Working individually, students should fill in the blanks of the following sentences with words or phrases:

The big shiny _____ is _____ in the street. The little blue _____ is _____ the lawn. The _____ cooking on the _____ smells _____.

Divide the students into small groups and provide each group with newsprint. Have students share all of their responses with one another and write each sentence on the newsprint.

Post the newsprint on the walls, and ask students to read all of the words and phrases used to fit in the blanks of the sentences.

Part 2

Ask the following discussion questions to solidify a definition of context.

- How would you explain why there are similarities and differences in the words and phrases used to complete the sentences?
- What images did you create in your mind when you thought about each of these sentences?
- What conditions or elements of a situation might exist that could influence how a person filled in the blanks?
- If all of these conditions make up what is referred to as context, how would you define context?
- How significant are the effects of these contextual factors on our attitudes and behavior?

Suggested Questions for Senior Citizen Interviews

- When you were my age, what were some of your favorite foods or menus?
- How often did you eat these foods?
- Who prepared the foods?
- When were the foods eaten?
- How often do you eat the foods now?
- Why do you eat them with this frequency?
- What are some foods that you eat now that were not available to you as a child?
- How did you learn to enjoy these foods?
- Can you remember the first time you ate those foods?
- Were there any foods you ate for a specific reason, such as to cure an illness?
- When you were a child, how often did you eat each day?
- What did you typically eat at each of these meals?
- Did your family eat meals together or just whenever each person felt like eating?
- What kinds of foods do you enjoy eating today?
- What do you think has been the greatest change in food and eating habits in your life?
- How do you feel about this change?
- Are there any changes you wish would not continue? Explain.
- Are there any new changes that you would like to make in the future?

Talk Show: Section B

D.J.: It's D.J. Norm coming at you once again. It's time for my wild and crazy talk show.

Five very special guests join us today to talk about food! You heard me right...food! You may not know it, but every one of you out there has a food attitude, and we've got some great guests to share their attitudes with you. Let's meet them. Go ahead and introduce yourselves and tell us a little about yourselves.

Dori: Hey everybody! My name is Dori Toze. I eat anywhere, anytime, and anything I want.

D.J.: Thanks Dori...Chip?

Chip: My name is Chip. Chip N. Dip. I'm a sophomore majoring in predentistry, and I'm doing this show because I have an attitude about a lot of things, food being one of them. I just don't think people take me seriously!

D.J.: Well Chip, you'll get your chance today! Who's next?

Dee: Hola! I'm Dee. Dee Lishus. I've been many places all over the world, and I've seen a lot of food. I thought I'd be a perfect candidate for your talk show, so here I am!

D.J.: So you are, and we're glad to have you Dee! I'm sure your cultural experience will enrich us all.

Di: When I realized my name was the way it is, Di Etrays, I thought, cool! Since then, I've been living my life to follow my name. I think it really makes an individual statement, don't you?

D.J.: I guess that's one way to look at it. And our last guest...

Hal: Hi! I'm Hal Thinut. I'm a pretty ordinary person, just like a lot of you listeners out there, and basically I'm just here to have a good time.

D.J.: There you have it folks. Five unique guests with us today. Dee, let's start with you. You say you've been all over the world. Do you regularly eat food you first tasted in other cultures?

Dee: Oh, si! From my travels I've learned so much about other countries and their food. Culture is certainly more than food, but food is of course, very important. I've learned to appreciate the diversity of foods that I've tried. Some of the food is hard to find in the United States, so I make a lot of my own food from scratch. I love vegetable stir-fry, sauerkraut and dumplings, Italian pasta, and, well, I could go on and on. I love dishes made from seaweed from Japan, and once in a while I get caviar. People think I'm really weird. They don't even give half the foods a chance. I think everyone should become more "culturized."

Dori: Hold it! Why should I get worked up about becoming more culturized? I'm perfectly happy with the food that I put in front of me!

Hal: Yeah, I agree. I'm just your average guy. I like just about anything, but just thinking about fish eggs and seaweed... Yuck! I think I'll pass.

D.J.: Hal, you eat pretty well though, don't you? I mean some of Dee's dishes sound pretty healthy. Wouldn't you try them because of that?

Hal: My philosophy is the better food you put in, the better performance you get out. But I can find plenty of good food in the supermarket—fruit, vegetables, chicken, stuff like that.

Dori: Sure, but in my opinion, that is boring. To me, taste is where it's at. You can't tell me fast food doesn't taste nice compared to some of that health stuff.

D.J.: What do you mean, health stuff?

Dori: Well, people tell me I eat unhealthy, and I eat fast food, TV dinners, chips, candy, pop—food like that, so I guess anything but food like that is healthy.

Hal: Not necessarily! My parents showed me that some foods that look healthy may not always be healthy. For example, most people think taco salads are good for you, but they can be really high in fat if you're not careful.

Chip: So you're saying anything high in fat isn't healthy?

Hal: Yeah, I guess so, for most people.

Dee: Well, oil is all fat, right? So since I fry food in oil, everything I eat is that's fried is unhealthy?

Hal: No.

Dori: But you just said...

Hal: I know what I just said, but there are different kinds of fat. And everybody needs at least a small amount of fat in their diet. Some fats are better than others, though. It's best to choose one that's better for you, like canola oil.

Chip: Being low in fat isn't the only thing that makes food healthy is it? I thought I heard somewhere that preservatives are unhealthy.

Dee: Where did you hear that? We need preservatives so our food doesn't spoil on the shelves before we buy it!

Hal: I think Chip is right. Some preservatives are safe. They've been used for centuries. But others have been researched and found to be unhealthy.

Dori: So can we just say here that a "healthy food" is a food which does not contain harmful substances for your body?

Dee: Sounds good to me.

Chip: Sure, me too.

D.J.: Whew! I'm glad we got that straightened out! It seems like everyone just kind of had their own definition of healthy.

Di: Yeah, that was really cool how you guys kept throwing your different views out to finally get a definition that everyone could accept and understand. Now we're all using the same terms—no misunderstandings!

Chip: That was a good observation, Di. In fact, speaking of observation, that's probably how we got a lot of our ideas in the first place. Since we all come from different backgrounds, we're all going to end up with different ideas as a result.

Hal: Hey, we'll have to watch what we mean when we talk to each other about some of these ideas from now on, so we understand each other and have some common ground.

D.J.: The minds are working now!

Di: Back before we got into all this, I wanted to comment on Dori's obsession with food having to taste just the way he wants it to or he won't eat it. Taste isn't everything Dori. What about looks? I want to look good. If a diet of "healthy" food keeps me thin, then I'm going to eat that way!

Dori: We only live once.

Hal: You may only live once, but why not make that once the best it can be?

Dori: The best means being able to enjoy yourself. That means eating what I want.

D.J.: We've got a caller on the line with a question. Go ahead Jamie.

Jamie: This is especially for Dori. With all the attention lately on health, don't you worry that what you eat may cause you health problems? What kind of shape are you in from your type of diet?

Dee: On a scale of 1 to 10? A one!

Dori: So, I may not be your idea of a 10, but I look fine. Health problems? I've got a strong family background. My grandfather is 96 and still going strong.

D.J.: (to the caller) Jamie, what is your attitude about your diet and potential health problems?

Jamie: I hear about nutrition and diet at school, in magazines, from my parents, and on TV. Sometimes it really gets overwhelming. I know how I should eat, but sometimes it's really hard because one, I love junk food—it tastes so good and it always seems to be convenient. And two, you hear so many different stories that you're not sure who or what to believe. Besides, my parents buy the food, so I basically eat whatever's in the house, good or bad.

D.J.: Speaking of buying food, how many of you shop for yourselves?

Chip: I do! Since I started college I've pretty much had to fend for myself. I just didn't like the school food much. It wasn't like Mom's home cooking, so I make my own meals. My friends think I'm nuts to spend time cooking when it'd save me time to just grab a meal in the food center. That may be true, but I'm becoming a pretty good cook. I even cook for my parents when I go home to visit, and they're impressed! They say it's a good thing to know how to cook. My mom may do a lot of cooking, but my dad's not so shabby himself. He usually makes breakfast and packs the lunches.

D.J.: Since you cook and shop for yourself, like Dee does, you sound like you might be willing to try some of Dee's favorite foods.

Chip: I'm not sure about that. I enjoy learning about other cultures, but I think I'll pass on their food.

Dee: Why won't you at least give it a try? What do you cook anyway?

Chip: I grew up in a "meat and potatoes" family, and that kind of meal really hits the spot! It kind of reminds me of home when I'm cooking, too. Maybe I should try other foods. I don't really think about it.

D.J.: Chip, you might have hit on something interesting. You mentioned that the attitude you have about cooking is one that your parents told you was a good one. How do the rest of you think you got the attitude you did?

Dee: I'd have to say that traveling gave me the outlook I have on food today. If I hadn't been to a lot of places, I might not even know about the foods I eat today, although my parents ate a lot of ethnic foods when I was growing up, too. They didn't make them from scratch though. We usually went out to eat at ethnic restaurants. I cook from scratch because I enjoy it.

Di: My attitude formed around my name. I thought it was a way to stand out as an individual. Many of the diets I've been on I found out about from magazines I read, like *Glamour*. Also, the TV and radio usually advertise some diet.

Hal: Di, do you try all the diets you hear about? I thought I heard something about some diets being dangerous if you're not careful. Do you check with a doctor at all before starting a diet?

Di: No.

D.J.: All of sudden, there's a nutrition craze, and everything is labeled "natural." Weren't some of these products natural before?

Dori: I may not know the answer to your question Norm, but if it says "natural," then what's there to question? It is what it says.

Hal: I remember one of my friends' parents telling us they read in a book that companies can put "natural" on a product if it's a certain percent natural, but not necessarily 100 percent.

Di: How come we all aren't told that?

Dee: Sometimes I wonder if the advertisers, or even the stores, aren't just telling us something to make us buy their products. How can we tell whether to believe what we hear?

Dori: This whole show's becoming more and more weird by the minute! If we keep this up, we're not going to know if we're coming or going! You are all saying different things. This whole attitude sharing is getting complicated!

Chip: If we're confused, how do we know our parents are experts on food either? And if advertisers and stores are trying to sell their products in any way they can, who comes up with those ways anyhow? Dori's right, attitudes and ideas are confusing when we sit here, listen to others, and start thinking about our own attitudes.

D.J.: Just what I love—a wild, crazy, and confusing talk show! Listeners, phone lines are open! Call in and tell me what you think. We're going to break, but we'll be back before you can grab a snack!

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Module C

6

▼ **Individuals, families, and societies have concerns about patterns of food consumption.**

Patterns of food consumption are any repeated or organized way of thinking or acting related to eating and using food.

Some considerations in looking at food consumption patterns are availability and type of food, timing of meals, location of meals, and the social quality of the interactions that take place when foods are eaten.

— **Availability and type of food**

- ... *Currently, a variety of foods are available year round.*
- ... *Packaged convenience foods are eaten by an increasing number of individuals and families.*

— **Timing of meals**

- ... *Snacking and grazing have become common practices that replace the family meal.*
- ... *Individuals and families in highly industrialized countries now tend to eat whenever they are hungry, regardless of the location and the people around them.*

— **Location of meals**

- ... *More meals today are eaten away from home at food service establishments or in a car.*

The third module examines food consumption patterns, and students continue their study of the consequences of changing prevailing food-related practices. The directed activities of this third module should sharpen the critical awareness skills of students to the level where students can independently recognize discrepancies of bias, contradiction, and inaccuracy when examining current food consumption patterns.

Patterns. Introduce the concept of patterns by having students examine a display of patterns and describe the commonalities and characteristics of what they see.

► **Teacher note:** Patterns to use for this display might include an instruction sheet and pattern pieces for a dress, a dance routine, a printed paper towel, a kaleidoscopic image, a quilt, ripples in the sand, a shell, a puppy training routine, printed wallpaper, a sheet of music, an audiotape of a drum beat, morse code or similar word puzzle, or a variety of fabric samples.

Ask students to look at all of the items on display. What do each of these items have in common? What do they represent? Write the word *patterns* on the board. Ask students to identify characteristics of the patterns they see on display. Develop a list of characteristics of patterns on the board similar to the following.

Patterns

- are a way of doing something.
- provide structure.
- act as guidelines.
- are predictable.
- can be simple or complex.
- vary for different reasons (for example, occasion, function, perspective, time of day, location, individual motive).
- may be repeated often or infrequently.
- may be rigidly followed or completely ignored.
- can be very creative.
- may be based on habit instead of being consciously selected or designed.

For additional questions to help students think about patterns, see support material ■ C.1, part 1.

Next, have students work in small groups to answer the following question: What are some examples of food consumption patterns? Have each group record its examples on newsprint. Answers might include eating the same kind of food on a regular basis (for example, fruit for breakfast, fish on Fridays), eating at certain times of the day, eating in different places (for example, in the car on the way to

Conceptual Statements

- ... *Eating outside the home may be changing patterns of family interaction and socialization of children. Parents may be more concerned about children's behavior in a public place and less concerned about what is eaten and the type of family interaction that takes place.*
- *Social interactions relating to food*
 - ... *Prepared foods have led to more individualized eating patterns because they allow family members to prepare meals alone.*
 - ... *Children are less apt to have parents or other adults monitor their food choices for nutritional balance.*

Another way to examine concerns about patterns of food consumption is to divide them into groups:

- (1) immediate versus continuing concerns, and (2) personal versus social concerns.*
- *Using these two groups, patterns of food consumption can be classified into four categories:*
 - ... *specific or short-term personal concerns,*
 - ... *specific or short-term social concerns,*
 - ... *general continuing personal concerns, and*
 - ... *general continuing social concerns.*
 - *When thinking about contemporary examples of food consumption patterns, the majority tend to be more immediate, specific, and personal in nature; however, the patterns of food consumption considered most desirable are more general, continuing, and social in nature.*

Directed Activities

work, at school, at home, in a restaurant), or eating alone or with others. Post newsprint and ask students to look at all of the examples listed and compare the ideas. Use the questions in support material ■ C.1, part 2, to stimulate class discussion.

Eating-awareness data chart. Assign the data chart in support material ■ C.2 to assist students in identifying their personal patterns of food consumption for three days. What is eaten? When? Where? With whom? and Why? Allow sufficient time for students to record their information. Then, ask them to complete the questions in support material ■ C.3.

The food patterns lab provides students with an opportunity to create their own pattern of using food and to investigate faculty members' patterns of food consumption. (See support material ■ C.4.)

After the food patterns lab, use support material ■ C.5 to help students become more aware of their patterns of food consumption by analyzing the information they recorded on their eating awareness data charts, support material ■ C.2.

► **Teacher note:** Plan the food lab experience to include a weekend. The lab will take several days to complete. This will allow sufficient time for students to complete their data charts.

Food-related cartoons. Choose various cartoons to help students identify and categorize current concerns about establishing and maintaining patterns of food consumption. Help students integrate experiences and build on previous learning by revisiting the concept of significant continuing concerns explored in modules A and B.

First, ask students,

- What are some characteristics of concerns?
- What makes some concerns more significant than others?

Next, have students look at each cartoon and identify the concern about food consumption patterns that is represented. Working as a class (or in small groups when appropriate), list on newsprint examples of current concerns related to patterns of food consumption. Post the newsprint. Then have students look at all of the concerns posted and compare for similarities and differences. See questions in support material ■ C.6.

Conceptual Statements

When current patterns of food consumption are compared with the valued ends that individuals and families consider desirable, two discrepancies emerge.

- *The first is confusion about what to believe and do resulting from the complexity of food consumption situations.*
- *The second is conflict between competing values that are held by the people involved in these situations.*
 - ... *Competing values include physical health, social well-being, efficiency, caring, responsibility, and economics.*

Directed Activities

Patterns of food consumption. Support material ■ C.7 provides four categories to use in classifying current patterns of food consumption. Have students list current patterns of food consumption from the cartoons and from their own personal experiences with food that represent each category. Examples are provided to illustrate each category. Use questions listed in the support material to help students examine their results.

Comparing food consumption patterns will help students look at current patterns in relation to those that might be considered more desirable. This identifies discrepancies that exist between the current state of affairs and the valued ends that individuals and families want to achieve. These discrepancies can cause confusion and conflict.

First, have students recall activities in previous modules that dealt with confusion and conflict, such as the maze and the creative grocery shopping simulation in module A. Ask students, How did these experiences make you feel? What did you think about during these experiences?

Show the cartoon in support material ■ A.17. Ask

- How do you think this person in the cartoon feels? Why?
- How would you describe the current state of affairs from this individual's perspective?
- What do you think this person's idea of a more desirable state of affairs is?
- Why do you say that?
- What is preventing this person from attaining the more desirable state of affairs?
- Share a personal example of a time when you were confused about what to do or experienced conflict between competing values that you held (for example, paying more for convenience versus being environmentally conscious when buying food).

Next, use support material ■ C.8 to identify and compare patterns of food consumption. Use the first examples to assist the class in understanding the directions. Then have students work individually or with a partner to complete the assignment. In a large group, ask them to recount experiences of more desirable patterns of food consumption as compared to those that currently exist.

► **Teacher note:** In completing this activity, ask students to revisit the notion of discrepancies introduced in module A. This will help students think more deeply about the way current patterns of food consumption maybe inconsistent with those patterns people consider desirable.

▼ Confusion and conflict limit efforts to resolve continuing concerns about patterns of food consumption.

Confusion over beliefs or actions, and conflicting values frequently interfere with thinking about family needs and goals.

— *Some individuals and families take action to meet perceived needs instead of acting on their real needs.*

... *Real needs are those that are basic to human existence, including physical needs for food and water, and psychological and social needs for security, acceptance, space, and a sense of confidence.*

... *Perceived needs are those that people come to think they need through their own observations and experience and through the efforts of others to influence their perceptions.*

Finally, working alone or with a partner, students should select or create a cartoon depicting a desirable pattern of food consumption. Assign support material ■ C.9 to help students prepare a rationale to defend their pattern of food consumption as part of their cartoon presentation. During the presentations, ask students what evidence supports their choice of a food consumption pattern.

Bridge analogy. Use this analogy to visually represent the discrepancy between the current state of affairs and the valued ends individuals and families want to achieve. The bridge represents the means to move from what currently exists to more desirable valued ends. What will it take for families to achieve their valued ends?

The following four directed activities focus on conflict and confusion as significant problems that result from a discrepancy between the current and the desirable patterns of food consumption. After exploring the way confusion and conflict interfere with the pursuit of common goals and real needs, students will learn some ways individuals and families overcome these problems.

Quenching our thirst. This activity provides tasks that guide student discovery of the following generalization: seemingly simple decisions are actually very complex. First, as a class, identify common goals individuals and families have regarding food consumption patterns. List answers to the following question on the chalkboard: What is it that people want to accomplish when they consume food? Then complete the quenching-our-thirst activities in support material ■ C.10 and ■ C.11.

Continue the quenching-our-thirst illustration as a class to identify how messages embedded in information and in one's own and other's actions illustrate real and perceived needs. Brainstorm a list of answers to the following questions, and write answers in columns on the board that represent real needs and perceived needs.

- According to the sources of information at the exhibits, what do people need to quench their thirst (for example, a great tasting beverage, an energy-producing beverage, a nutrient-dense beverage, or a low-calorie beverage)?

- What would the physical requirements for a thirst quenching beverage be? (For example, it is a liquid that moistens the mouth and throat, has an acceptable taste and smell, and will not adversely damage the body.)

Next ask, What is the difference between these two lists of needs? How would you explain the difference between a real need and a perceived need? To help students think of examples, ask these questions:

Conceptual Statements

- *Clarifying real needs requires reflecting on one's own motivations and the motivations of others.*
- *To distinguish motives that are deliberately manipulative from those that are in everyone's best interest, individuals and families need accurate information about the consequences of pursuing alternative goals.*

Directed Activities

- What is the real need for a coat?
- What is the perceived need for a fur coat?
- What is the real need for toothpaste?
- What is the perceived need for (fill in brand name) toothpaste, according to their ads?
- What are some other examples of real versus perceived needs in our daily lives?

Finally, ask students to give examples of real versus perceived needs that are reflected in people's food consumption patterns. Help them to draw conclusions from this experience.

New foods lab. Conduct this lab to help students practice the process of determining real versus perceived needs. Assign each lab group a different new food product to prepare, such as individually packaged meals, gelatin desserts, cheese fries, or taco pizza. After sampling the new foods, have each student complete the chart in support material ■ C.12 to identify motives for developing and using each new food product. Then, as a large group, answer the following questions to discuss how individuals and families determine real versus perceived needs:

- What does the word *new* cause us to think about a product? (For example, a product is better in some way, different than before, more exciting.)
- How might the assumptions we make about a *new* food block our thinking?

Real needs versus perceived needs. List student views about their real needs for food on the board (for example, that it is nutritionally sound, acceptable in appearance and taste, affordable). In a second column on the board labeled *perceived needs*, ask students to list some reasons, other than need, why people might purchase a new food product. Star those perceived needs that students think manufacturers of new products are trying to create. Encourage students to reflect on their own motivation for buying new food products. Use their answers to summarize the thought processes that are used in determining real versus perceived needs. Finally, have students answer the following questions:

- Are you more often motivated by real or perceived needs when selecting foods? Give examples.
- What statements can you make about the thinking process that individuals and families use in determining real versus perceived needs?

Credible sources of information. In the next activity students will identify credible sources of information about food by developing criteria to use in ranking food-related articles. Introduce the idea of credibility by reading a children's story, like *Pinnocchio*, in which a

Conceptual Statements

— *Judging credibility involves asking questions about the source's consistency and trustworthiness.*

- ... *Credible sources have a track record of honesty.*
- ... *They are in a position to be knowledgeable about the subject.*
- ... *They do not have a vested interest in influencing another's beliefs.*
- ... *They usually agree with other reliable sources of information.*
- ... *They give reasons to support the value judgment.*

Confusion and conflicting values frequently interfere with individual and family thinking about the consequences of current food consumption patterns.

Directed Activities

character is not truthful. Afterward, ask students the following questions:

- How do we determine if a person is telling the truth?
- What does it mean to be credible?
- Why is there so much confusing and conflicting information about food?

Food-related articles. Next, have students read support materials ■ C.13, "The Fat of the Land," and ■ C.14, "Death by Fried Chicken." Use the questions in support material ■ C.15, Food-related Articles, to analyze the credibility of the sources and determine the truthfulness of statements in the articles. This can be done as either a group or individual exercise.

Ask students to find two articles of their own and complete the questions in support material ■ C.15. Have students share their articles in small groups. Then ask each group to rank their articles from most credible to least credible sources of information. Give each group a sheet of newsprint. On the top portion, each group is to list their ranking of sources. Ask each group to state the criteria they used in ranking the sources of information on the bottom portion of the newsprint. Post the newsprint. Then, as a large group, compare the rankings and the criteria used by each small group.

- What similarities do you notice in the rankings? In the criteria used?
- What differences do you notice in the rankings? Were different criteria used?

Finally, ask the class to reflect on and generalize from this experience using the questions below.

- In what ways do food-related sources of information pretend to be something they are not?
- Why is some of the inaccurate information the most popular?
- What sources of food-related information would you consider to be most credible?
- What makes a source credible?
- How would you determine who or what source you will trust?
- How would individuals and families benefit from accurate information?

Consequences of current food consumption patterns. The activities above demonstrate that confusion and conflict interfere with the pursuit of common goals and real needs. Confusion and conflicting values also limit an individual's ability to think about consequences of different food consumption patterns. Use the following activity to investigate and dramatize the various categories of consequences.

Conceptual Statements

- *Although the physical consequences of contemporary consumption patterns are not fully known, researchers have linked several life-threatening diseases to undernourishment, overconsumption of food, and excessive consumption of food additives and preservatives.*
- *The social consequences include increased individualism, decreased social interactions, and increased social distinctions between the haves and the have-nots.*
- *Emotional consequences of contemporary food consumption patterns (dietary fads and eating disorders) include self-esteem and body image problems.*
- *Economic consequences range from the reallocation of money for food in families to economic imbalances at the global level.*
- *The destruction of the environment and the need to dispose of food-related waste are the most significant environmental consequences.*
- *These types of consequences, although distinguishable, are complex and interrelated; for example, the effects of an eating disorder are physical, social, emotional, and economic.*

Confusion and conflicting values may limit the development of the critical thinking skills needed to address and solve food consumption concerns.

An effective critical thinker is more likely to

- ... *organize information into frameworks or perspectives.*
- ... *deliberately take another's perspective.*

Directed Activities

Organize the students into small teams of investigators. Assign each group a different category of consequences to investigate. (For examples, see descriptions of physical, social, emotional, economic, and environmental consequences in the conceptual statements.) Have students work together in small groups to complete support material ■ C.16. Next, ask each group to develop a drama that portrays one specific example of a consequence from their chart. Dramas must show the pattern(s) of food consumption that lead to the consequence rather than just portraying the consequence itself. The following guidelines are suggested for the dramas:

- Introduce the characters, set the stage, and identify the context of the situation.
- Dramatize the conflict, which might be between people or between people and nature.
- Portray a possible resolution to the conflict.

► **Teacher note:** Teachers might provide a folder for each category of consequences that includes samples of information, questions that might help to direct the search for additional information, and a list of suggested references, including library, community, and government sources of information. The library media specialist could help develop the list.

So far, the module has explored different ways confusion and conflict interfere with thinking about food consumption patterns. To reinforce the conceptual content covered, have students describe these difficulties before introducing the third and final difficulty considered in this module. The last difficulty focuses on the way confusion and conflicting values limit or prevent the development of intellectual and social skills needed to address and solve the family's concerns about establishing and maintaining food consumption patterns. The next two learning experiences will help students identify and develop the characteristics of effective thinkers.

Tonisha. Ask students to read the case study about Tonisha in support material ■ C.17 to begin identifying characteristics of effective versus ineffective thinkers. Use the questions in the support material to stimulate large group discussion about the effectiveness of the character's thinking. Ask students to share an example of when they or someone they know used effective thinking skills in addressing and solving food consumption concerns.

Developing dietary guidelines will help students practice using effective thinking skills. In this activity, have students create their own dietary guidelines for good health. Then introduce the students to *Nutrition and Your Health: Dietary Guidelines for Americans*, published by the United States Departments of Agriculture and

Conceptual Statements

- ... *consider ideas from multiple perspectives.*
- ... *deliberately suspend judgment until he or she has sufficient evidence to support factual and value claims.*
- ... *be aware of biases, opinions, and values that may be distracting.*
- ... *make sound, deliberate evaluations using criteria that have been critically examined for implicit values.*
- ... *insightfully discuss evidence by using active listening and questioning skills.*

▼ **Certain aspects of context influence patterns of food consumption.**

Historical aspects of context include both personal and social experiences.

- *On a personal level, each individual and family brings a unique personal history to a situation.*
- *On a societal level, transportation and industrialization have influenced individual, family, and cultural patterns of food consumption.*
 - ... *A wider variety of foods is available year round as a result of advances in transportation.*
 - ... *Industrialization has created a greater variety of food products.*

Directed Activities

Health and Human Services (1995) and discussed in detail in support material ■ C.18. Have students compare their own guidelines to these and discuss similarities and differences. Have them write a press release announcing the dietary guidelines. Use questions in support material ■ C.19 to conclude this activity.

The next four activities are designed to help students identify and examine aspects of context that influence food consumption patterns. The first three activities focus on specific aspects of context that affect patterns of food consumption. The last activity helps students integrate these experiences and engages them in interpreting information about context.

Historical context. Begin by looking at historical context from a personal or family perspective. Ask students to think of a food that their family has regularly acquired locally (for example, picking a fruit, vegetable, or nut; purchasing a fruit or vegetable in season from a local farmers market; or making a special trip to a favorite manufacturer or restaurant). Use the following questions to guide class discussion.

- How did this pattern of regularly acquiring this food get started in your family?
- What are some reasons why this practice is important to your family?
- What does this tell you about patterns of food consumption?

Field trip to the grocery store. Conduct a field trip to help students think about how historical aspects of context influence current patterns of food consumption. Organize students into small work groups and assign each group a category of food to inventory. Categories of foods for this activity might include cheeses, fruits, vegetables, cereals, cookies, and soups. See support material ■ C.20 for student recording materials.

After collecting data at the grocery store, have each group report their findings to the class. Use the following questions to guide a discussion about the ways transportation and industrialization have affected people's food consumption.

Conceptual Statements

Personal aspects of context include the emotional attachments individuals and families associate with food.

- *Emotional attachments to particular foods occur though social conditioning in the family.*
- *Food consumption patterns resulting from this social conditioning may not be consistent with the best available information.*

Sociocultural aspects of context include social conditioning resulting from food messages conveyed through the media, businesses, and industries.

- *Social conditioning occurs as individuals and families receive repeated messages concerning food consumption from a variety of sources.*
- *The media uses repetition and other persuasive techniques to convince individuals and families to believe certain ideas about foods and food practices.*
 - ... *These ideas and practices may conflict with traditional beliefs and current knowledge about what is considered acceptable to eat or do.*
 - ... *The motivation of the media may not be in the best interest of individuals and families.*
- *Some businesses and industries strive to make money regardless of the consequences to the consumer. This includes the promotion of specific foods or food habits that are known to be detrimental to health.*

Directed Activities

- *Why do we have so many varieties from which to choose?*
- *How has the varied food supply available to us influenced our patterns of food consumption?*
- *How have our patterns of food consumption influenced our food supply?*
- *Considering the variety of foods available, which do you think are the most popular?*

Filling the shopping list. Students will recognize how personal context affects food consumption by completing support material ■ C.21. In small groups, have students share their selections and answer the questions at the bottom of the support material.

Sociocultural context. Ask students to examine sociocultural context by looking at pictures of different types of lunches promoted by business and industry through the media. Select three to five pictures that portray a wide range of lunch menu options. Suggested pictures might include a diet pill or drink; a hamburger, fries, and soft drink; a large club sandwich; a frozen microwave lunch; a sandwich with a piece of fruit, and so forth. Ask students to view pictures and answer the questions in support material ■ C.22.

Conceptual Statements

- *As a result of social conditioning, some individuals eat more or less food than they need to nourish their bodies.*

Examining contextual factors leads to greater understanding of the concerns individuals and families have about patterns of food consumption.

- *The process of interpreting information involves gathering data regarding the development of food consumption patterns. This is done to develop insight into how existing conditions contribute to food-related concerns.*
- *By asking higher-order questions and gaining more contextual data, individuals and families are better able to see how their own situation reflects larger societal concerns.*

▼ **Learning thought processes and applying them daily enables individuals and families to work together on addressing and solving continuing concerns about food consumption.**

Directed Activities

Contextual factors lab. Conduct this lab to help students interpret information about context. The lab will contribute to their understanding of complex situations in which food-related concerns arise. Begin by sharing a list of foods with the class that will be available in the lab (including the staples in their kitchens). Ask each student to write a nutritious lunch menu using the foods available.

► **Teacher note:** The food products available for this lab must include a variety of foods from the food guide pyramid. Students might discuss guidelines for preparing nutritious menus, recognizing that the means of organizing food change over time and vary in different cultures. They might choose to require each lunch menu to follow nutritional recommendations of the food guide pyramid or some other current means of organizing food selections. Share the rationale for selecting the guidelines being followed in class. Students can refer back to the dietary guidelines they developed in a previous learning experience.

Next, organize the students into small work groups to prepare a nutritious lunch. Have each group draw out of a hat six to eight of the foods available. Ask students to create a nutritious lunch menu that is acceptable to their small group using the foods selected. Encourage students to combine parts of their original individual menus. If desired, students may exchange one to three food items with one or more groups.

After preparing and eating their meal, have students complete support material ■ C.23 to evaluate their work and reflect on the significance of contextual factors.

The next four directed activities will introduce students to the process of developing critical awareness. The first two, the assumption finding and the low-calorie menu labs, are designed to help students identify and examine blocks to critical thinking, which prevent a person from developing critical awareness about current patterns of food consumption.

Assumption finding lab. Display a stack of paper cups and an opaque beverage pitcher filled with a snack, such as raisins and peanuts, for students to see as they enter class. Do not tell students what is in the pitcher. Start the class by asking students, What do you think the pitcher and cups are for? Create three columns on the chalkboard: evidence, conclusions, and assumptions. In the first

Conceptual Statements

Development of critical awareness will help prevent individuals and families from responding to concerns about food consumption in unthinking ways.

— *The process of critical awareness involves learning to look for external and internal blocks to thinking.*

... *External blocks to thinking include deceptive communication, unreliable sources of information, and social pressures on individuals and families. For example, the media perpetuate numerous stereotypes about people who are overweight.*

... *Internal blocks to thinking include irrational or self-defeating patterns of thinking, such as making hasty generalizations, overreliance on authorities for answers, either/or thinking, and labeling.*

— *Being critically aware of one's own and others' thinking involves asking six questions:*

... *What gaps, ambiguities, or inconsistencies are present in the evidence being presented?*

... *What assumptions are being made in the position being presented? (Are bias or ethnocentrism present? How do they preclude, limit, or prevent one from making reasonable interpretations or drawing sound conclusions?)*

Directed Activities

column list the evidence (for example, pitcher, cups). Is there any more evidence (for example, the cups are small)? Next, write their conclusions in the second column (for example, We will be sampling a beverage).

Before completing this chart, discuss as a class what it means to make an assumption. Ask students to share examples of assumptions they make in everyday life. How does an assumption differ from a conclusion? Refer to the chalkboard and ask, If this is the chalkboard evidence and these are the conclusions you drew, what assumptions are being made? List answers in the third column labeled *assumptions*. Use support material ■ C.24 to begin a discussion on the reasoning about the display and to evaluate the assumptions upon which it was based.

Pass out the cups and snack. Then ask the questions in part 2 of support material ■ C.24. Save students' answers for future reference.

Low-calorie menu lab. Conduct this lab as a second means of upending students' expectations and helping them develop critical awareness. Ask students to compare and then prepare selected menus, having them rank the menus from greatest to least number of calories. Suggested menus include a beef dinner, a casserole dinner, a main dish salad, or a frozen low-calorie dinner. All menus should include a dessert. The goal for selecting the menus is to surprise students with which menu has the lowest calories. Be sure to determine the calorie totals for each menu ahead of time. For example, a beef dinner with dessert should have a lower total number of calories than a purchased frozen low-calorie dinner and dessert. Discuss the difference between empty calories and those that are nutritious.

After the class has discussed reasons for their ranking of the menus, share the actual calorie totals for each menu and ask students to compare the results. The questions in support material ■ C.25 are designed to stretch students' thinking about blocks to critical thinking.

The Fran and Jesse stories in support material ■ C.26 provide students with two character sketches. The stories illustrate that there is a difference between having awareness and being critically aware.

Ask students to read the descriptions of Fran and Jesse and to compare each character's level of awareness about what is going on in his or her daily life. In a large group discuss the following questions:

Conceptual Statements

- ... *What alternative interpretations of the evidence are possible?*
- ... *Which of the interpretations provides the best explanation of the evidence?*
- ... *Who benefits most from actions based on these interpretations?*
- ... *What are the probable consequences for all people involved in the situation?*

In addition to being aware of blocks to critical thinking, individuals and families who evaluate their patterns of thinking and acting are more likely to make sound judgments about what action they should take on food consumption concerns.

— *Evaluating patterns of thinking and acting involves*

Directed Activities

- What differences are noticeable in the awareness each of these individuals has for what is going on around him or her?
- What conclusions can be drawn about their level of awareness?
- What does it mean to be critically aware?

Record the students' working definition of critical awareness on newsprint for future reference.

Critical awareness. Teach the process of developing critical awareness using an inductive strategy that includes the following steps adapted from *Practical Strategies for the Teaching of Thinking* by Barry Beyer (1987): (1) Introduce the skill; (2) Execute the skill; (3) Reflect on what was done; (4) Apply skill to new data; (5) Review the skill.

Begin by telling students that they will be learning to use the thinking process called critical awareness. Introduce the skill by restating the tentative working definition of critical awareness the students developed during discussions of the Fran and Jesse stories. Cite ways students can use or have used critical awareness in classroom activities and in everyday life. Explain how this thinking skill is useful and why. Next, ask students to execute the skill using a concrete example, such as becoming more critically aware of the packaging used on a food product they buy. Unpack a bag of groceries in front of the class. Unwrap all of the food products and separate the food from the packaging. Ask students to consider what the pile of packaging tells about daily food consumption.

- What are some reasons why all of this packaging comes with food (for example, aesthetics, advertising, convenience, safety)?
- What are the consequences of this food consumption pattern?
- What alternative practices might be more desirable?

Use the questions to guide student reflection about food packaging and the thinking process involved in developing critical awareness. Finally, have students apply the critical awareness process to new data (for example, using an article on trends in eating). The culmination of this process is to review the skill.

Evaluating one's thinking and acting. Besides becoming aware of blocks to their critical thinking regarding food consumption patterns, individuals and families who deliberately evaluate their thinking and acting are more likely to make sound judgments in addressing and solving food consumption concerns.

Begin by reviewing with students what was done in modules A, B, and C. Then ask students to establish a working definition of argumentation. Be sure to help students grasp the *cognitive* (reasoning from sound evidence to conclusions) and *social* (cooperative dialogue) aspects of the argumentation process and distinguish argumentation from having an argument. Then working in small

Conceptual Statements

- ... *establishing criteria to determine how closely a pattern of thinking and acting brings one to accomplishing goals.*
- ... *reviewing criteria by taking into account several different perspectives, the immediate and long-range timeframe, and possible value conflicts.*
- ... *giving reasons to support the criteria selected.*
- *Another part of this process involves giving reasons to support the evaluations made.*
 - ... *Reasons used in supporting evaluations are based on both factual claims and value standards held by individuals and families.*
 - ... *Different standards of quality are used to examine these factual and value claims.*
 - ... *Factual claims are examined for truth and accuracy. (Metcalf, 1980)*
 - ... *Value claims are examined in terms of their consequences and underlying value principles.*
 - ... *The quality of the reasoning on which the evaluation is based is determined by examining whether the conclusion(s) follows from the reasons given.*

Directed Activities

groups, students should select or write a scenario describing a specific food consumption pattern that might be evaluated in class (for example, eating a diet high in fat, salt, or sugar). Be sure their descriptions provide sufficient detail for use in class.

Next, divide each group into two sides. Ask one side to construct the supporting argument for the food consumption pattern described in the scenario. The other side should develop an argument opposing the position. As a large group, discuss the differences between supporting and refuting statements. This provides an opportunity to revisit and probe student understanding of differences between evidence, conclusions, and assumptions.

Alternative food consumption patterns. To build on previous learning experiences with argumentation, conduct a lab experience during which students prepare foods that represent alternative food consumption patterns. After the lab, have students develop arguments supporting and opposing the patterns. Teachers may want to put the supporting and opposing formats on back-to-back worksheets or on separate pages. (See support material ■ C.27 and ■ C.28 for instructions and a student worksheet.)

Talk show. As a way to summarize and review module C, role-play the third portion of the talk show, support material ■ C.29. This final directed activity builds on previous learning experiences involving the use of mental arguments. See Developing Perspectives, support material ■ B.14. It is used somewhat differently here to introduce a more deliberate process of evaluating patterns of thinking and acting related to concerns of families about food consumption. Ask students to summarize what they have learned, emphasizing the intellectual and social skills explored in Module C. This provides the groundwork for additional work on practical reasoning in modules D and E using different food-related concerns.

Discussion Questions: Patterns

Part 1

- What are some examples of patterns in daily life?
- What are some nonexamples of patterns?
- Does the weather have patterns?
- Do babies have patterns?
- Do teenagers have patterns?
- Do animals have patterns?
- Do plants have patterns?

Part 2

- How would you define patterns of food consumption?
- Which examples are similar to one another and could be grouped together?
- What major aspect of food consumption do these examples represent?
- What other major aspects of food consumption patterns do these examples represent?
(For example, kinds of foods eaten, when foods are eaten, where foods are eaten, and interactions that take place while foods are eaten.)

Directions: Use the chart below to collect information about the foods you eat in one day, using one chart for each of the three days. Be sure to record every food and beverage you consume.

[illegible]

Questions Accompanying Data Chart

Adapted from *Minnesota Secondary Home Economics: Food and Nutrition Curriculum Examples*, 1986.
St. Paul, MN: Minnesota Department of Education. Used with permission

Directions: After collecting information about your eating habits for three days, answer the questions below to become more aware of patterns of food consumption in your life.

- What types of food do you eat most? Least?
- Why do you eat this type of food most often?
- What times of day do you eat most often?
- What influences this pattern?
- Is this pattern regular, fairly regular, or often irregular? Explain why.
- With whom do you eat most often?
- How do these people influence your eating patterns?
- How do your eating patterns change when you are with different people? Explain.
- Where do you eat food most often?
- How does this place influence your patterns of food consumption?
- What reasons do you give most often for eating?
- What does this tell you about yourself?
- How are your patterns of consumption similar from day to day?
- What are the biggest differences that occur in your patterns of food consumption from day to day?
- What gives you the most satisfaction in regard to your patterns of food consumption?
- What are you least satisfied about in your patterns of food consumption?
- Write two or three sentences that would describe your patterns of food consumption.

Food Patterns Lab

Direction to teacher: The purpose of this lab is to generate some examples of patterns in the kinds of food people eat, including those they serve to others and those served to them.

1. Introduce the lab using the idea stated above.
2. Provide a collection of pictures, recipe books, and food-related magazines for students to page through to get ideas about people's differing patterns of food consumption.
3. Suggest a few patterns to get the discussion started (for example, families using the food guide pyramid, Muslims fasting during Ramadan, children eating peanut butter and jelly sandwiches, Jews eating matzo during Passover, or Christian children eating candy canes at Christmas).
4. Ask the questions below to extend student thinking about the formation and consequences of different food consumption patterns.
 - Why do patterns exist in what foods we eat? (For example, habits and expectations have developed over time, patterns create interest, patterns provide variety, or patterns make food attractive.)
 - What specific kinds of foods might one serve at an informal gathering of a large group of people?
 - Why would these foods be appropriate for this type of gathering? (For example, finger foods allow people to move around and socialize.)
 - What does this tell us about how patterns are developed?
 - What might happen if someone tried to create a new pattern of food consumption or change a pattern that had been around for a long time?
5. Next, organize the students into small lab groups. Provide them with the following directions:
 - Each lab group will prepare a tray of food for a gathering of faculty members.
 - As a group, select foods to arrange on a tray in a unique pattern.
 - Bring a list of foods and recipes and a sketch of your group's pattern for the teacher's approval.
 - Complete a plan for preparing your group's tray of food and develop a list of survey questions to ask teachers about their food consumption patterns.
6. Decide when this lab could take place (for example, during the noon hour, after school, or during a class period) and what additional directions to students are necessary to conduct this lab. Several approaches might be taken for interviewing teachers about their patterns of food consumption. Each student could be asked to interview one teacher or each group could be responsible for collecting information about one aspect of patterns of food consumption (for example, when foods are eaten). Students may collect information formally or informally.
7. After the students have met with faculty members, have students share their findings as a large group, including the patterns of behavior noticed as the teachers sampled their foods, something interesting they learned that is similar to their own experiences with food, and something they learned that is different from their experiences with food.

Discussion Questions: Food Pattern Lab

- What specific patterns of food consumption do you notice in your life?
- What factors in your life have the greatest influence on your patterns of food consumption? Compare your data with a partner. How are your patterns of food consumption similar? How are they different?
- How would you account for the differences?
- What have you learned about when foods are eaten?
- What have you learned about the interactions that take place when individuals and families are eating?

Discussion Questions: Food-Related Cartoons

- Which concerns would you group together because they are similar in nature?
- How would you describe the nature of these concerns?
- How do other examples of concerns differ from this group?
- What other concerns can be grouped based on their similarities? How would you describe the nature of these concerns?

Patterns of Food Consumption

Directions: List current patterns of food consumption that fall under each category.

<i>Immediate and Specific Personal Concerns</i> 1. Making a selection from a vending machine.	<i>Immediate and Specific Social Concerns</i> 1. Worrying about getting in trouble for not separating your garbage for recycling. 2. Being unable to get certain foods because of shortages due to a strike.
<i>General and Continuing Personal Concerns</i> 1. Trying to develop healthy eating habits.	<i>General and Continuing Social Concerns</i> 1. Determining who should be responsible for meeting people's food needs.

Discussion Questions

- Which category do most examples of current patterns of food consumption represent?
- Why do you think this is so?
- How would you explain why fewer examples represent concerns that are general, continuing, and social in nature?
- What are some reasons why it might be important to examine concerns related to food consumption that are more general, continuing, and social in nature?

Comparing Food Consumption Patterns

Directions: Listed below are examples of food consumption patterns. Generate more examples in the first column for the two categories of concern. Complete the second column by identifying a more desirable pattern for each example in the first column.

<i>Continuing Personal Concerns</i>	
Current Food Consumption Patterns	More Desirable Patterns
Continuous snacking after school	
Skipping breakfast and thus feeling hungry before lunch	
<i>Continuing Social Concerns</i>	
Current Food Consumption Patterns	More Desirable Patterns
Unjust, unbalanced food supplies (pockets of starving, hungry people)	
The consumption of high-fat, highly refined foods which leads to health problems in U.S.	

Rationale for a Food Consumption Pattern

Directions: After completing your cartoon, prepare a defense. This involves giving reasons why the pattern of food consumption you have illustrated is desirable. What evidence can you offer to support your position? Answer the questions below to help you organize your defense before presenting your more desirable pattern of food consumption to the class.

- What pattern of food consumption does your cartoon represent?

- Why do you feel this pattern of food consumption is better?

- How accurate and complete is the evidence you have used to support your position?

- What might happen if people use this pattern?

- What value is illustrated in this cartoon?

Quenching Our Thirst

Directions to teacher: The class can select a common goal to pursue or they may be provided with one. The example that follows uses the common goal "quenching our thirst." The procedure described could be adapted and used with several different goals.

1. Write "Quenching Our Thirst" on the board.
2. Ask students to identify ways in which individuals and families accomplish this goal and list all ideas on the board.
3. Ask students to complete the following sentence on a slip of paper: To quench my thirst I would select _____ because _____, _____, _____, and _____.
4. Collect these slips of paper and retain them in order to refer back to them after the information stations. (Return these answers to students later as indicated in support material ■ C.11.)
5. Organize the students into small work groups, and assign each group one type of beverage to investigate.
6. Suggest the following guidelines to define the tasks each group will complete for their beverage: (a) collect and display a variety of information about the beverage; (b) use at least four different sources (for example, advertisements, councils, educational publications, newspapers, journals, parents, professionals) for the display; and (c) present the pros and the cons of consuming the beverage.
7. Allow several days for students to collect information and construct an exhibit displaying their type of beverage.

It might be helpful to show students examples of information they could use for their displays. Perhaps a folder could be provided for each group that would include the following: samples of reliable and unreliable information available about the beverage, advertisements and company brochures, questions about the beverage that might direct the discovery of information, and a list of suggested references about the beverage.

When students have completed their exhibit, they should rotate as small groups and visit each one. Have each student complete support material ■ C.11 to record his or her thoughts about how the information influences his or her choice of a thirst-quenching beverage. Ask students to compare and then share their original and final selections of a thirst-quenching beverage. Use the questions below to help students reflect on the information exhibit experience.

- How did you feel as you moved through the exhibits?
- Can you think of other times you have felt this way? If so, give examples.
- What bothered you the most about the information presented?
- In one sentence, how would you summarize the effect this experience had on you? What does this experience tell us about our patterns of food consumption?

Information Exhibits

Directions: At each exhibit, answer the following questions about the information that is presented.

- What was the most interesting thing you learned about this beverage?
- What sources of information did you observe at this exhibit?
- Was the information confusing or conflicting in any way? If so, explain.
- How would the information at this exhibit influence your choice of a beverage to quench your thirst?
- After completing the information exhibit experience, complete the following sentence: To quench my thirst, I would select _____ because:
- Now ask your teacher for your original answer to the above sentence. Attach it to this paper. Refer to your original answer to complete the following questions: Did your answer stay the same? If so, explain why. If your answer changed, explain why.

New Foods Lab

Directions: To complete the following chart, examine the packages on display and base your answers on how you would interpret the information presented.

Product	Why do you think this product was developed?	Would you have purchased this product?	Explain why or why not.	According to the package, what do people need?

The Fat of the Land

By Dorinda Elliott. From *Newsweek*, March 20. ©1995, Newsweek, Inc. All rights reserved. Reprinted by permission.

Add this to the list of communists' unsavory legacy in the Czech Republic: the fatty sausage and the greasy potato dumpling. The communists didn't invent the unhealthy diet, but they promoted it by subsidizing cheap sausage and dairy products. The result: 45 percent of Czech women are obese, and the country has one of the world's highest death rates from heart disease. But with the Velvet Revolution complete, Czech doctors are trying to foment a Roughage Revolution.

It's a weighty task. The diet drive is headquartered in Dubec, on the outskirts of Prague. Rudolf Poledne, a biochemist, has bombarded the village's 1,800 residents with health propaganda. His team held a salad-making contest. (The primary-school principal won.) A local hospital has treated 400 high-risk patients with cholesterol-reducing drugs. The Central European Center for Health and Environment, the Berlin-based organization that launched the Dubec program, hopes to use the model across the entire former Eastern bloc.

In the Czech Republic, economic reforms have already reshaped the country's diet. When the government stopped subsidizing meat and dairy products in 1991, prices for high-cholesterol butter and sour cream jumped three times, and the cost of salami more than doubled. Thanks to the private market, carts of bananas, apples and oranges began to appear on every corner. Cholesterol levels dropped by some 5 percent; the mortality rate from heart disease dropped for men by 13 percent and for women by 9 percent. Fitness and weight loss became a kind of fad among women and children. "Before, it was just considered normal that if you had had two children," says Poledne, "you should be fat."

The collapse of communism also allowed doctors to break another taboo. Communist bureaucrats had discouraged scientists from exploring new ideas about health that trickled in from the West—in part because concerns about cholesterol threatened the entire agricultural system, which emphasized meat and dairy production, and highlighted the communists' inability to deliver fresh vegetables to the shops. "During the communist regime, if someone spoke of vegetarian food, it was almost a crime against the state," says Sona Strbanova, a Czech biochemist who works for the U.S. Agency for International Development in Prague. "You can't introduce healthy living without democracy."

But changing people's habits is tough. The biggest successes in Dubec have been with women and children. At the primary school, which now serves vegetables grown in its own garden for lunch, kindergartners are indoctrinated in the perils of potato dumplings. Martina Taborska, 13, eats soy meat, but her father prefers meat. Women complain that their husbands yell at them when they try to serve salads and vegetables.

Telling lies: At U Sokolovy, the Dubec sports bar, the resistance lives on. A group of construction workers—most of them patients in the high-risk program—are smoking and guzzling beer in front of a Russian-Czech hockey game on the TV. Among the high-risk patients, only a third of the smokers have quit, and weights haven't fallen. "I try hard to change, but I haven't made good progress," says Pavel Pokorny, 50, a ruddy-faced construction worker who admits he lies to the doctor about his beer consumption. "We all lie. I need it because I work hard and I must eat well." His daily menu: bread and butter for breakfast, and bread, fatty sausage and egg dumplings for lunch and supper. "What can I tell you? If my wife started making vegetables every day, I'd go someplace else to take my meals." This revolution has a long way to go.

Death by Fried Chicken

By Bill Powell with Frederick Shaw Myers. From *Newsweek*, September 24. ©1990, Newsweek, Inc. All rights reserved. Reprinted by permission.

In the nation with the world's highest life expectancy, you would think Nishimaru Shinya would be regarded as no more than a crank. He is the author of a bestselling book entitled "41 Years of Life," which argues that half of all Japanese born after 1959 will die before reaching that age. And that of survivors, only one fifth will be around for ten years after that. His prognosis has nothing to do with any outbreak of war. Nor does he talk of the next great earthquake. Instead, he says, "Instant foods and fast foods with their additives are upsetting the Japanese metabolism." Essentially, Shinya believes the Japanese are condemned to death by fried chicken.

While Japanese health researchers and officials dismiss the tract as an exercise in fearmongering, they agree about the deterioration of the Japanese diet. In the years just before World War II, the Japanese ate mainly seafood and vegetables. There was lots of rice and not much else. After the war the United States brought wheat to help feed the starving millions, and by the late 1950s, milk and other dairy products were standard in the Japanese diet. A century ago the average Japanese man lived to only 35, the average woman to 37. Last year they lived to 76.5 and 82, respectively.

But Japanese are starting to pay the price of prosperity. Over the last 20 years, beef consumption in Japan has soared. So, too, has the intake of sugar, hard liquor and fat-laden dairy products like ice cream. And with that have come increases in health problems linked to diet, including heart disease, strokes and a variety of cancers. In 1988, according to statistics from the Health and Welfare Ministry, there were 42,000 more deaths in Japan than in the previous year. That broke a decade-long period in which the number of deaths each year declined. More ominously, the statistics showed a sharp jump in the number of people dying from heart disease and stroke. Children are not immune. Says Tadao Shimao, a physician at the Anti-Tuberculosis Association: "We are starting for the first time to observe many young children with diabetes, resulting from an overconsumption of sugar. We now even find children with protein anemia."

Nutritionists say the danger signs should take no one by surprise. They point out how rapidly the consumption of fat as a percentage of total caloric intake has increased in Japan. In 1950, it was about 7 percent. By 1988, it had quadrupled to 28 percent. This was still well below Americans' artery-clogging 40 percent— but above what Dr. Nevin Scrimshaw, a Harvard nutritionist, thinks of as a caloric line of death: studies show consistently that if the intake of saturated fat surpasses 25 percent, he says, the risk of heart disease increases sharply. Cut it below 25, and it goes down just as sharply.

Tofu time? This month the Ministry of Health and Welfare commissioned the Japanese Society of Nutrition to create menus containing nutritional information for distribution to the country's 510,000 restaurants. Is swift improvement likely? The United States, after a decade-long health and-fitness binge, has arrested the trend toward fat but not reversed it. The Japanese, though, are only now getting used to enjoying their affluence. Right now the trendiest dish in all of Tokyo is *tiramisu*, an Italian dessert choking in chocolate, cheese and sugar. The Japanese may not be ready to hear that it's time again for tofu. "As far as diet and health concerns go," says a Western researcher, "I think Japan is where the United States was about 20 years ago." In other words, the Japanese diet is going to get worse before it gets better.

Food-Related Articles

Directions: Read the assigned food-related articles. Complete the information below for each article.

Title of article:

Author(s):

- Summarize in three to four sentences what this article is telling you about food.
- How many sources does this article use? List them.
- Are these sources in a position to be knowledgeable about the subject matter?
- Are the sources reliable?
- If you could ask the author one question, what would it be?
- Do you believe statements in this article are truthful and accurate?

Consequences of Current Food Consumption Patterns

Directions: Complete this chart to identify current food consumption patterns that lead to the category of consequences your group was assigned. Then identify immediate and long-range consequences of this pattern to yourself and others. Label each consequence with a +, -, or +/- to indicate whether the consequence is positive, negative, or both positive and negative. Finally, provide evidence to support your conclusions.

Description of Pattern	Consequence		Evidence
	Immediate to self:	Immediate to others:	
	Long-range to self:	Long-range to others:	
Description of Pattern	Consequence		Evidence
	Immediate to self:	Immediate to others:	
	Long-range to self:	Long-range to others:	
Description of Pattern	Consequence		Evidence
	Immediate to self:	Immediate to others:	
	Long-range to self:	Long-range to others:	
Description of Pattern	Consequence		Evidence
	Immediate to self:	Immediate to others:	
	Long-range to self:	Long-range to others:	

The night air felt sticky as Tonisha made her way across the parking lot. The Atlantic Rhythm Club's neon sign blinked once, then darkened. Trudging to the van, Tonisha felt exhausted. Even the short walk seemed too much for her tired legs.

Tonisha laughed to herself.

"What if my fans saw me like this?"

On stage Tonisha was electric. She jumped, screamed, and pounded the stage with her dancing. Her voice came through the speakers raw and alive, as if she had endless energy.

The contrast between her stage persona and how she felt now made Tonisha laugh.

"If this is what a rock star feels like at the end of the day, maybe I've picked the wrong career."

What was the difference, she wondered. What made her feel so alive on stage and so awful now?

It's the music, she thought, the beat, being part of making that sound is exciting. And when it's not just a practice, when it's a gig with people dancing and clapping, that gives me a buzz, she thought.

But she had to admit there was another buzz, too.

Right before she went on stage, Tonisha always guzzled a can of soda, whether she was thirsty or not. Tonisha sweat a lot during the show and she didn't like to feel parched in the middle of a song. Along with the liquid she needed, Tonisha also got a jolt of caffeine and sugar.

As she got in the van, Tonisha wondered if being on the road was taking its toll on her health. She surveyed the all-too-familiar interior of the van: a cot, a portable TV, and a microwave were crammed in with the sound equipment. She wished they had installed a refrigerator, too. She wanted fresh fruits and vegetables, but the band rarely stopped anywhere to buy fresh produce and there was no place to store fresh foods anyway.

When they first outfitted the van for the tour, Donna had joked that they had "all the comforts of home." Now Tonisha wondered if she might feel better if they were in a real home instead of traveling all the time. She missed talking with her family over meals. In fact she missed meals themselves, eating regular food at regular intervals.

"I feel awful," she groaned, mad that her rock singer life had turned out to be a lot less than glamorous.

Wedging between the purses and backpacks on the cot, Tonisha thought back over the day as she waited for the other band members...

"Hey, Donna! How much longer until we're there?" Tonisha yelled over the roar of the engine.

She was just waking up in the back of the van. From the angle of the sun, she guessed it was late afternoon, long past her turn to drive.

"We'll get there when we get there," Donna said like she always did. "Stop yelling. You're going to wear out your voice. Remember, we've got four more weeks on this tour."

Donna was right, Tonisha thought, she did have to take care of her voice. Only two weeks into the tour and she was starting to feel run down. She had never felt this low before.

She opened a can of soda and climbed to the front of the van.

"Donna, I'm starved. I slept through breakfast and lunch. Can we stop somewhere?"

"You just didn't want to drive, Rip Van Winkle," Donna joked.

"Not true. I'll drive after we eat," Tonisha volunteered. "I must have slept 10 hours, but I still feel tired."

Donna checked her watch. "We don't have time for a sit-down meal."

"Not even at a fast food place?" Tonisha asked.

"Sorry. It's drive through again tonight."

Tonisha saw evidence of the last three nights' dinners on the floor, bags of wadded up hamburger wrappers, cold french fries and empty ketchup packets.

"Just not McDonald's, OK? I feel like I've eaten a million hamburgers on this tour," Tonisha said.

"I saw a billboard for a taco stand a little while back," Donna said. "How about Mexican?"

"Sounds like a treat," Tonisha deadpanned. "What I wouldn't give for one of your mom's turkey dinners. Homemade bread, sweet potatoes."

"You're making me homesick," Donna said. "That's the one drawback in our otherwise elegant life."

"One drawback?" Tonisha laughed. "I can think of others."

Donna pulled into the drive through lane.

"How many tacos do you want?" she asked.

Tonisha paused. "Think about it. Tacos are almost the same as hamburgers. It's just seasoned ground beef inside them."

"And lettuce and tomato and cheese," Donna added.

"Got a magnifying glass? I want to see all those tomatoes."

As Donna leaned out the window to place their order, Tonisha said, "Wait, don't order any tacos for me. I'm going to get a taco salad. They've got edible bowls made out of tortillas."

"I read those can be really greasy," Donna said.

"I know," Tonisha sighed. "And for that price, we could buy some good lettuce and carrots and cauliflower, make a really good salad."

"The grocery store hasn't got a drive through, sweetheart. What's it going to be, taco or taco salad?"

Tonisha munched the taco salad. It didn't have much flavor. It wasn't very filling, either.

"I'm still hungry," she said. "Can I eat some of those chips?"

Donna relinquished the rest of her dinner.

The rest of the night went fast. Tyrone and Martha pulled up in the other van just as they reached the Atlantic Rhythm Club. Everyone scrambled to set up. Practice went great. They were psyched because they knew the concert was sold out.

In the green room, Tonisha, Donna, and Tyrone stuck candles into three packages of Twinkies for Martha's birthday.

"You made me a cake?" Martha said in mock appreciation when she saw the paper plate loaded with Twinkies. "You must have slaved all day."

On stage, Tonisha bounced to life. The crowd liked the band's original songs as much as their covers of dance standards.

After the show, they jammed for another two hours. Tyrone picked up Tonisha's new song and added some guitar riffs.

About halfway through, though, Tonisha began to drag. She was tired and hungry, but there was no sitting down. Tonisha downed another soda and continued singing.

When they finished, Tyrone said Tonisha didn't look too good and asked if she was getting sick.

"No, but I'm really tired," Tonisha said.

Donna told her to crash in the van, the others would pack up the equipment.

"Nobody gets paid if you get sick," Tyrone joked.

"I'm really hungry," Tonisha thought as she dug around in the van for something to eat.

She knew no restaurants would be open so late, so she popped a bag of popcorn in the microwave. It was tasty, but it didn't quite hit the spot.

"The glamorous life," Tonisha sighed as she fell asleep on the hard cot.

Discussion Questions

- What does Tonisha know about food (for example, that food affects a person's physical well-being, that some foods are nutritionally better than others)?
- How would you describe Tonisha's thinking?
- Is she an effective or ineffective thinker? Why? (For example, Tonisha is an ineffective thinker because she doesn't take action based on what she knows.)
- What does an effective thinker do? (For example, they think about what they know and seek ways to apply their knowledge to their daily lives; they also recognize what they do not know and need to find out.)

Dietary Guidelines

By Julie Allington, Nutrition Education Consultant, Department of Public Instruction.

What Should We Eat to Stay Healthy?

Many U.S. diets have too many calories and too much fat (especially saturated fat), cholesterol, and sodium. They also have too little complex carbohydrates and fiber. Such diets are one cause in the United States of high rates of obesity and of certain diseases—heart disease, high blood pressure, stroke, diabetes, and some forms of cancer.

One great opportunity we have to affect our health lies in deciding what and how much to eat. The diet that meets your body's needs has all of the following characteristics:

Adequacy—It provides enough of each essential nutrient, fiber, and energy.

Balance—It includes foods from each of the food groupings.

Calorie Control—It provides the amount of energy you need to maintain appropriate weight—more or less.

Moderation—It provides low intakes of fat, salt, sugar, or other constituents.

Variety—It uses different foods to provide the needed nutrients rather than the same foods day after day.

Importantly, too, it pleases you. That is, it consists of foods you enjoy eating and can easily obtain—foods that fit your tastes, personality, family and cultural traditions, lifestyle, and budget. At its best, a well-planned diet is a source of pleasure as well as good health.

Educational tools available to assist in making healthy food choices include the Dietary Guidelines for Americans, the Food Guide Pyramid and the new food label. The Dietary Guidelines and the Food Guide Pyramid can help consumers read and interpret the new food labels. The information contained in these resources is complementary. An understanding will provide consumers with the knowledge necessary to plan healthy diets.

Dietary Guidelines for Americans

The Dietary Guidelines for Americans are seven guidelines for a healthy diet for Americans ages two years and over. These guidelines, developed jointly by the U.S. Departments of Agriculture (USDA) and Health and Human Services, are the best, most up-to-date advice from nutrition scientists and are the basis of federal nutrition policy. The seven guidelines are:

- **Eat a variety of foods.**
- **Balance the food you eat with physical activity—maintain or improve your weight.**
- **Choose a diet with plenty of grain products, vegetables, and fruits.**
- **Choose a diet low in fat, saturated fat, and cholesterol.**
- **Choose a diet moderate in sugars.**
- **Choose a diet moderate in salt and sodium.**
- **If adults choose to drink alcoholic beverages, they should do so in moderation.**

Eat a Variety of Foods

It is important to eat a variety of foods from the food groups in order to obtain the nutrients required for the body to be healthy. The human body needs more than 40 different nutrients for good health. It makes sense that no one food or food group could contain all the nutrients the body needs.

The Food Guide Pyramid was developed to give direction to the guidelines and a visual presentation of the food groups and the servings recommended from each to get the nutrients needed. It is an outline of what to eat each day. It is not a rigid prescription, but a general guide that lets you choose a healthy diet that is right for you.

At the base of the Food Guide Pyramid are breads, cereals, rice, and pasta—foods from grains. You need the most servings of these foods each day. The next level includes foods that come from plants—vegetables and fruits. Most people need to eat more of these foods for the vitamins, minerals, and fiber they supply. The Dietary Guidelines recommend approximately 55 percent of our calories come from these two food groupings.

On the third level of the Food Guide Pyramid are two groups of foods that come mostly from animals: milk, yogurt and cheese; and meat, poultry, fish, dry beans, eggs, and nuts. These foods are important for protein, calcium, iron, and zinc.

The small tip of the pyramid shows fats, oils, and sweets. These are foods such as salad dressings and oils, cream, butter, margarine, sugars, soft drinks, candies and sweet desserts. These foods provide calories and little else nutritionally. Most people should use them sparingly.

The new food labels contain information on how a particular food fits into an overall daily diet. Labels will include information about the essential nutrients per serving including vitamins, minerals, protein, calories, carbohydrates, saturated fats, and total fat.

Balance the Food You Eat With Physical Activity— Maintain or Improve Your Weight

The Pyramid shows a range of servings for each major food group. The number of servings that are right for you depends on how many calories you need, which in turn depends on your age, sex, size, and how active you are. Everyone should strive to eat at least the lowest number of servings in the ranges.

The circles and triangles on the Food Guide Pyramid represent the fat and added sugars, respectively, in foods. Fat and added sugars are concentrated in foods from the pyramid tip—fats, oils, and sweets. Some fat or sugar symbols are shown in the food groups to remind us that some food choices in these food groups can also be high in fat or added sugars. When choosing foods for a healthy diet, consider the fat and added sugars in your choices from the food groups, as well as fats, oils, and sweets from the pyramid tip.

Thanks to new regulations from the Food and Drug Administration (FDA) and the Food Safety and Inspection Service of USDA, nutrient information will appear in the labeling of almost all processed foods. The new labels promise to help clear up much of the confusion that has prevailed when making decisions about product selections on supermarket shelves.

Serving sizes specified on the label will now be more uniform across all product lines so that consumers can more easily compare the nutritional qualities of similar products. For example, all brands of pretzels will have a uniform serving size so you can quickly compare them. Serving sizes will reflect the amounts people actually eat. For example, a can of carbonated beverage will be listed as one serving, not two servings.

Terms used to describe a food's nutrient content, such as light, fat-free, low-calorie, will now have to meet government definitions so that descriptors mean the same for any product on which they appear. Regulations also cover health claims—implicating a food to a disease or health-related condition. Allowable health claims have been authorized by the FDA and model health claim statements that contain all of the elements considered by the FDA to be essential to make the claim nonmisleading. In addition, a footnote—at least on larger packages—will list the daily values for selected nutrients for both a 2,000 and 2,500-calorie diet. Although people may consume more or fewer calories per day, they still can use the values as reference points for their own diets and as a way to compare foods.

Choose a Diet with Plenty of Grain Products, Vegetables, and Fruits

Diets high in vegetables, fruits, and grain products are important because they supply energy, vitamins and minerals, are low in fat, aid in digestion, can lower blood cholesterol, and may reduce the chances of some types of cancer. The Food Guide Pyramid recommends two to four servings of fruits a day, three to five daily servings of vegetables, and six to eleven servings of breads, cereals, rice, and pasta. The number of servings is adjusted to the number of calories needed.

Diets high in vegetables, fruits, and grain products provide complex carbohydrates and dietary fiber. The new food labels provide information on total carbohydrate, dietary fiber, and sugars per serving.

Choose a Diet Low in Fat, Saturated Fat, and Cholesterol

Most health authorities recommend a U.S. diet with less fat, saturated fat, and cholesterol. Populations with diets high in fat have more obesity and certain types of cancer. The higher levels of saturated fat and cholesterol in our diets are linked to our increased risk for heart disease. The fats in animal products are the main source of saturated fat in most diets, with tropical oils (coconut, palm kernel, and palm oils) and hydrogenated fats providing smaller amounts. Animal products are the source of all dietary cholesterol. It is recommended that a maximum of 30 percent of the daily calories come from fat. Of this 30 percent, less than 10 percent of calories should come from saturated fat, the other 20 percent unsaturated. Information on the new food label can help people achieve these goals.

As a consumer, you could select similar food products from the supermarket shelf and compare percent daily values of fat, saturated fat, and cholesterol. The new labels will make it easy to compare nutrient contributions.

The Food Guide Pyramid focuses on fat because most U.S. diets are too high in fat, especially saturated fat. You will get up to half of your daily allotment even if you pick the lowest fat choices from each food group and add no fat to your foods in preparation or at the table. You decide how to use the additional fat in your daily diet. You may want to select foods from some of the food grouping that are high in fat—such as whole milk instead of skim milk. Or you may want to use it in cooking or at the table in the form of spreads, dressings, or toppings.

Choose a Diet Moderate in Sugars

Sugar is a simple carbohydrate that provides energy but few nutrients. One major health issue that results from eating too much sugar is tooth decay. One teaspoon of white sugar equals 16 calories. A 2,000 calorie daily diet should contain a maximum 160 calories from added sugars.

It is helpful to read the ingredient label to get an idea of the sugars contained in a product. Sugars are indicated by names such as sucrose, glucose, dextrose, sorbitol, fructose, maltose, and so on.

Sugar is found naturally in products like milk and fruit. Other forms of sugar are often added to food during processing or preparation. On the Food Guide Pyramid, the triangle symbol represents sugars found naturally in fruits and milk. It is the added sugars that provide calories with few vitamins and minerals.

Most of the added sugars in the typical U.S. diet come from the foods in the Pyramid tip—soft drinks, candy, jams, jellies, syrups, and table sugar added to foods like coffee and cereal. Added sugars in the food groups come from foods such as ice cream, sweetened yogurt, chocolate milk, canned or frozen fruit with heavy syrup, and sweetened bakery products like cakes and cookies.

Choose a Diet Moderate in Salt and Sodium

Sodium is an essential source of life-giving minerals. Sodium deficiency results in dizziness, muscle cramps, and exhaustion. In the Western World, sodium deficiency is rarely a problem.

Too much sodium can contribute to high blood pressure, a disease that occurs in one out of four Americans. Go easy on table salt and processed foods that are high in sodium. Table salt is a mixture of sodium and chloride. The term *salt* does not mean the same as sodium because salt is only 40 percent sodium.

Sodium is not graphically represented on the Food Guide Pyramid. Much of the sodium in people's diets comes from salt added when cooking and at the table.

Information on food labels can help you make food choices to keep sodium moderate. Processed foods that are high in sodium include cured meats, luncheon meats, many cheeses, most canned soups and vegetables, and soy sauce. Look for the lower salt and no-salt-added versions of these products.

It is helpful to read the Ingredient Label to get an idea of the sodium contained in a product. Sodium-containing ingredients are indicated by names such as baking powder, sodium citrate, sodium benzoate, sodium nitrate, and monosodium glutamate.

If Adults Choose to Drink Alcoholic Beverages, They Should Do So in Moderation

If adults choose to drink, they should have not more than one or two drinks a day. Alcoholic beverages provide calories, but little else nutritionally. Some people should not drink alcoholic beverages, including

- women who are pregnant or trying to conceive.
- individuals using medicines, even over-the-counter kinds.
- children and adolescents.



Discussion Questions: Developing Dietary Guidelines

- What intellectual and social processes did you use to arrive at your guidelines?
- On what guidelines did your group agree?
- On what guidelines did your group disagree? Explain why.
- What factors distracted you in the process of developing the dietary guidelines?
- What do you think food and nutrition experts think like? How did taking the perspective of a nutrition expert help you complete your tasks?
- What other perspectives did you take into consideration?
- What other perspectives could you have taken into consideration?
- What criteria did you use to accept or reject a specific recommendation?
- What will be important to tell others when announcing the dietary guidelines?

**Field Trip to the Grocery Store**

Directions: Using the chart below, take inventory of the food category your group has been assigned. You will present this information to help the class think about how historical aspects of context influence current patterns of food consumption.

Category of food assigned: _____

Describe the forms in which this food can be purchased.	List the brand names and manufacturers available.	Count total number of varieties each brand offers.

Filling the Shopping List

Directions: Imagine that you are going to shop for the following list of groceries. Indicate the specific food selection you would make for each item listed below. In addition, state a reason for each of your selections.

List of Groceries	Specific Selection	Reason for Selection
breakfast food		
bread		
fruit		
sandwich filling		
cookies		
candy		
cheese		
meat		
vegetable		
snack food		

Discussion Questions

- What are some examples of emotional attachments associated with specific food selections?
- Which of these attachments have resulted from social conditioning in the family?
- Which of these attachments have resulted from social conditioning by society?

Discussion Questions: Sociocultural Context

- What business or industry is promoting each of these lunch menus?
- What messages about food consumption are embedded in each picture?
- What kind of lunch did you eat when you were in elementary school?
- What kind of lunch do you eat now?
- What factors caused your thinking and behavior regarding lunch to change?
- How do the ideas and practices presented in these pictures conflict with what you know and believe to be acceptable?
- How does business and industry influence our patterns of food consumption?
- What motivates businesses and industries?

Contextual Factors Lab Evaluation

- What personal aspects of context influenced the development of your original lunch menu?
- In what ways did the availability of food products affect your personal selections? In what ways did availability affect the selections of your group?
- How did working in a group make the menu preparation easier? Explain why you think this was so.
- How did working in a group make the menu preparation more difficult? Explain why you think this was so.
- How would you describe the impact contextual factors have on people's thinking and behavior?
- Why might it be important to understand how contextual factors affect a situation?

Discussion Questions: Assumption Finding Lab

Directions to teachers: Use the questions in part 1 to discuss the students' reasoning about the display and to evaluate their assumptions. The answers to part 2 should be listed on the newsprint.

Part 1 (before the snack)

- Why do people make these assumptions?
- How might someone who makes these assumptions act?
- What could be assumed instead?
- What would we need to find out to be able to evaluate the credibility of these assumptions?

Part 2 (after the snack)

- What is your reaction to having your expectations upended? (Teachers may have to define "upended" for students.)
- What do you think this experience illustrates about our thinking?
- Can you think of a time when you behaved in an unthinking way?
- What happened?
- How did you become conscious of what you were doing?
- Why weren't you thinking in the first place?
- What personal and social blocks to thinking has this experience illustrated (for example, social conditioning, hasty generalizations, either/or thinking, and labeling)?



Discussion Questions: Low-Calorie Menu Lab

Directions to teacher: Use the following questions to help students stretch their thinking about blocks to critical thinking.

- How do the actual calorie rankings compare to those of the class?

- Why did your expectations differ from reality?

- What additional external and internal blocks to thinking has this lab helped us identify?

- When might these blocks limit or prevent critical thinking about people's food consumption patterns?

Fran and Jesse**Fran**

You know how it is. It's a really nice day outside after school, or it's finally the weekend. You just want to do something fun and not do any work. "Too bad," Mom always says. "Do your chores first!" I tell her I will do them later, but she insists on it being now! If I made the rules, I'd let my kids do their chores whenever they wanted to, as long as they got them done.

Anyway, two days ago it was really nice out and one of my friends and I were going to get an ice cream cone. Well, Mom stopped me and told me I had to do my chores first. So, I did. One of my chores is to empty the wastebaskets in the house, put new bags in them, take out the garbage, and then separate the recyclables into the right bins in the garage. It's a pain separating all the garbage. In fact, the whole thing takes too darned long as far as I'm concerned!

Then today, two days later, Mom tells me I have to take out the garbage again! I complained that I just took out the garbage, and it was a real pain to have to separate it all. I asked her who made so much garbage around here, and she said that we kids eat so much that food garbage is always piling up. Besides that, all the things we buy come in a package that we throw away. I told Mom that I wouldn't mind half as much if I only had to bag the garbage and put it on the curb. She insists on recycling and says that we are doing our part to save the environment in the city's voluntary recycling program. Maybe we are, but our neighbors aren't. How is one little family like ours going to make a difference by recycling?

Besides, if they really wanted to cut down on garbage, why don't the companies just take care of the problem by giving us less packaging? I know some of the things I buy could do without a package. Like my cassette tapes, for example. They wouldn't have to come in those plastic holders. They're such a pain to open anyway!

I didn't tell Mom, but when I took all the garbage out today after she asked me to, I just put it all out on the curb in one bag. It was so much easier, and if I'm going to have to do this every other day, that's one way to save time!

Jesse

"Hey Jesse, Let's go out for hamburgers today!"

"Sure, sounds great! I brought money today, and I'm starved!"

"Hi, can I take your order?"

"Sure, I'd like a hamburger, medium fries, medium drink, and lots of ketchup please," Jesse said.

"For here or to go?"

"Here."

"Tom, what do you want? I'll treat today."

"Thanks. Uh, I'll have the same except make that a large drink and large fries."

Jesse and Tom picked up their food, grabbed some napkins and straws, and sat down at a small table. They had unwrapped everything and were making big piles of ketchup when Tom commented, "You know, even though this paper packaging is supposed to be better, the old foam containers were sure a lot less messy!"

"Maybe," replied Jesse, "but these aren't too bad. If they are doing some good rather than harm to the environment, I guess I can handle it."

"I suppose," Tom agreed.

"Speaking of packaging, this table is too small!" Jesse commented, "We've hardly got any room to set our food. This isn't the first time I've noticed this. Let's move to a bigger booth."

After they moved to a bigger booth, Jesse started to wonder what kind of harm, if any, all the improved food wrappings were doing to the environment. This restaurant does big business. Even though the corporation recently changed to using paper packaging and recycled paper bags, Jesse was trying to imagine all of the garbage they must collect in one day. And this is only one restaurant! It seemed overwhelming. Jesse wondered to himself, "What can a guy like me do about this?" He thought about not supporting this hamburger restaurant by eating elsewhere, but he didn't think that would really make a difference.

Jesse wondered if the owner or manager of this restaurant even knew what happened to their garbage after it left the store. Writing a letter to the head of the restaurant's corporation, encouraging them to be as environmentally safe as possible was the next idea that came to Jesse. He wondered if they'd listen to one little person. Maybe there were several other people who had already written such a letter, and his letter would be giving additional support.

Jesse realized he had a lot of questions about what was happening with the restaurant's garbage and not many answers. He decided to ask his teacher the next day about the amount of garbage from food packaging and where it all goes. Jesse remembered his teacher saying that they would have to do an environmental awareness project. Maybe, thought Jesse, his group could do a project that would do some good in the community.

Alternative Food Consumption Patterns

Directions to teacher: Conduct a lab experience during which students prepare foods that represent alternative food consumption patterns (for example, current practices—eating high sugar foods and alternative dietary patterns—reducing sugar content of recipes, incorporating high fiber ingredients). After the lab, reflect on the alternative food consumption patterns used in lab. Continue by asking students to develop arguments supporting and opposing the position. Coach students to anticipate arguments and use alternative perspectives. Have them consider economic, political, and moral perspectives of groups affected by the food consumption pattern. Each argument should include a series of factual and value claims that provide the best support for the positions taken. Factual claims are statements that are determined to be true or false on the basis of observed evidence. For example, grapes are grown in Chile. Value claims are statements that describe the standard of worth or criteria for judging something to be good, bad, or in between. For example, people should not buy grapes harvested by exploited workers. To help students develop their arguments, provide a common format, such as that presented in support material ■ C.28.

To illustrate the evaluation process, walk through one argument as a class. Examine the factual and value claims, and draw conclusions about what to do. If any of the reasoning used to draw conclusions is found to be inadequate, students should revise the argument to reflect these new insights. Use the following set of procedures for examining and revising the argument:

First, examine the statements that provide a point of view about the food consumption pattern. How complete and accurate is the description of the context in which the food consumption pattern takes place? Use the scenario as a point of departure to think about who is affected, whose interest is being served, and what the consequences might be to all affected by the position.

Second, look at the factual claims.

- Are the factual claims relevant and accurate?
- Are they based on available evidence? For example, if students say, "We should not do X because it harms the environment," they would need to provide more detail to show that the factual claim—X harms the environment—is true.

Third, look at the value claims used to indicate what is considered right or wrong.

- Are criteria or value standards made explicit and defined?
- Is reliable knowledge of positive/negative and short-term/long-term consequences used?

Fourth, examine the reasoning used in drawing the conclusion about what to do.

- Does the argument hang together?
- Are gaps or inconsistencies evident?
- Does the conclusion follow from the reasons given?

In conclusion, ask students to revise or improve the reasoning that was found to be inadequate. After walking through one argument, ask students to apply this process in small groups, evaluating the adequacy of a second argument. Share small group results and ask the class to revise or improve upon this second argument.



Argumentation Format for Justifying or Refuting Food Consumption Patterns

Directions: Use this worksheet as a format for recording arguments from the Alternative Food Consumption Patterns Lab.

1. Supportive arguments usually take this form:

It is right, good, or of benefit to do (selected food consumption pattern or practice) because (list several reasons). State your specific judgment and list the factual and value reasons that you would use to defend your position.

Judgment:

Reasons:

2. Refuting arguments follow a similar pattern:

It is wrong, bad, or harmful to do (selected food consumption pattern or practice) because (list several reasons). State your specific judgment and list the factual and value reasons that you would use to defend your position.

Judgment:

Reasons:

Talk Show: Segment C

D.J.: Howdy folks! We're back with guests—Dori Toze, Chip N. Dip, Dee Lishus, Hal Thinut, and Di Etrays—and we're back from a commercial break. We've got a caller with us right now who has something to say about what we've been talking about. Ted?

Ted: Hello?

D.J.: Hey Ted, you're on the air.

Ted: I was thinking about what Dori said about how confusing things seem to be getting and how you guys don't really know who or what to believe. I've read some really great articles for my nutrition class about the effects food labeling and advertising have on consumers. Also, I've just realized how our eating habits have changed.

D.J.: What do you mean our eating habits have changed? Mine haven't.

Ted: You eat at fast-food places, don't you?

D.J.: So?

Ted: How many fast-food places are around you right now?

D.J.: Probably about five are nearby.

Dori: Think about when you were little, maybe 20 years ago. There were not as many fast-food places around. I'd be willing to bet people didn't eat out half as often then as they do now.

D.J.: I can vouch for what you're saying. I've sure got a lot more places to choose from now than I did when I was little. But what does that have to do with eating habits changing?

Ted: Think about it. In the past, more people ate in the home together. Now they eat more often at a fast food restaurant or in the car. I'll bet that what you see going on in restaurants with families isn't what would be going on at home if that's where the meal was.

Hal: Why?

Dee: I bet I know why. My parents are pretty well-known and important people. When we go out, they always expect us to act perfect. They just die if my little brother and I start arguing or my brother eats with his hands instead of his silverware. They get embarrassed and worry someone might be watching and thinking they can't control their kids. But at home, things are chaos! Usually everyone's talking at once, my brother and I are going at it full force. We can have whatever table manners we want within limits since no one's around to see us.

Ted: That's exactly what I mean. Communication and behavior changes if people are dinning out at a restaurant. At one time people used mealtimes for talking about what was going on in each other's lives. Now they're either in such a hurry, they don't have time for conversation, or they're worried about how the public expects them to behave.

Hal: Now that you've mentioned it, I can see a change in my family. Since everyone's gotten older and interested in their own things, we rarely seem to be able to eat together. Usually we each just eat whatever we can find when we're hungry and when it fits into our schedule.

Ted: When do you get a chance to talk? Do you know what's happening in each other's schedules?

Hal: Kind of. I have a general knowledge of where everyone is, basically so we can take phone messages, get picked up at a certain time, or attend events together. I do have to admit I don't know as much about how everyone's feeling or how they're doing as a person like I do with my friends.

Dee: Well, you can certainly tell Dori doesn't eat with his family much. If he did, he probably wouldn't eat so much unnutritious junk! When I eat around my parents, they're always checking that I get at least some nutrition. I guess they're just looking out for my best interests.

Dori: Why are you always picking on me? I'm not stupid. That's what I want to eat. Sure, my mom would get on my case. That's why I usually eat when mom's not around.

Dee: All you eat is junk food. What do you need to know about that? Junk food is junk food!

Hal: Maybe if he knew more about what was in some of that fast food, he wouldn't eat it all the time. Has anyone stopped to consider that maybe it's just in our country that we have so much food and confusion over it? What about countries where people are starving? Maybe we should think about that next time we pig out when we don't really need to. It has always bothered me that we have all this food right at our fingertips, and we take it for granted. Where does it come from? Who grows it? Are companies putting things in food that are unsafe? What are all those long names on labels and are they really necessary?

Chip: What I want to know is, do I really need to know about all this food stuff? How do I find out without it taking a great amount of time? Where do I find out that is a reliable source?

Dori: Basically what you want to know is, "What am I supposed to eat," right? I know that's what I'm asking. You say one thing, somebody else heard something different, another person wants to believe something else. It all comes down to what in the world should we all be eating.

D.J.: I also think what we're supposed to eat couldn't be the same for all of us. We're all different. We wouldn't all like eating the same thing.

Ted: Think about what you might be losing out on. Don't you like your mom or other family members?

Dori: My family's really important to me, but you're telling me that by eating the way we usually do, apart, that we might be missing valuable time together?

Dee: I think that's exactly what Ted's trying to say. Can you see his point?

Ted: If you really thought about it, you'd probably say your family is at least a little more important than filling your stomach the way you want to all the time, even if it means putting up with a few things you may not enjoy.

Dori: I think you might have actually convinced me, but I'm not saying it's going to be easy!

Ted: Nobody said anything having to do with food was easy.

Dee: Dori actually might have changed his attitude a little bit for the better! You know, I think my respect for you has increased.

Dori: Thanks, I think...

Di: All this talk has got me thinking our eating really has changed. If I was born 50 years ago, I might not have had many diets to choose from. They didn't have that many products. Maybe I wouldn't even want to be on a diet. It was more fashionable to have an hourglass figure back then, rather than a slim or even skinny shape.

Chip: In this day and age, it's really incredible the selection of products and brand names we have to choose from compared to even just a few years ago. Technology really has taken off.

Dori: Which brings me back to the matter of who can we really believe or trust if there's so many different kinds of food and information along with it?

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▼ How individuals and families obtain food is a concern because their ends vary.

Valued ends are goals or results that individuals and families consider important to achieve.

- *Some families work together on critically examining, conceptualizing, and justifying their goals.*
- *In other families goals are not discussed but are evident in what families say and do.*

In the fourth module, students study the ways individuals, families, and societies actually obtain food. They look at the influence contextual factors and goals have on obtaining food. The module helps students understand the ways families set and prioritize goals. And it helps them develop the capacity and inclination to make reasoned judgments.

Nested bowls. Introduce the concept of valued ends by using nested bowls to illustrate how individuals and families often take narrower and more specific actions in pursuing broader ends. Display a set of nested bowls and show how the pieces fit inside each other. Use this as an analogy to show how a valued end may begin as an immediate goal and then expand several times until it is large or global in scope. Give examples from everyday life. For example, initially one's goal may be to walk two miles each day. Ask the following questions:

- Why would a person decide to walk two miles?
- What is the benefit of walking two miles as compared to one mile?

One possible answer is that walking helps an individual feel better mentally and physically. On a broader level, exercise promotes good health by reducing stress. It improves muscle tone and can be a pleasant experience. Continue asking questions to help students derive the valued end of the broadest scope: to help individuals to be more productive and self-fulfilled.

Food-related statements. To expand on the ideas introduced in the nested bowls activity, present a series of food-related statements that range from narrow to broad in scope. The following are examples listed in order of increasing scope, with the first being the narrowest:

1. Carrots are a good source of vitamin A.
2. Most people in the United States should limit the amount of fat they consume.
3. One should eat nutritious snacks rather than junk food.
4. Children who are exposed to a variety of foods have a far greater chance of developing positive food attitudes and habits.
5. People should eat a balanced diet every day, maintain a healthy body, and be productive members of society.

Mix up the statements so they are in random order before giving them to the students. Working in small groups, students should arrange the statements from narrowest to broadest. If students have difficulty understanding the distinction between narrow and broad statements, use the strategy of the nested bowls activity by questioning the narrow statements. Ask, Why is this important? Students' responses will be broader in scope than the initial statements. Also help students understand that some goals are instrumental in attaining other goals.

Food-related goals and the actions taken to achieve them are based on values.

- Basic values are applied in multiple contexts. Other values are more specific and relative to certain people or groups.
- Values can be distinguished from other human motives such as needs, desires, and preferences.
 - ... Values are criteria or standards of worth for judging the best course of action to take in a given situation. Commitment to freedom, equality, and truth are considered basic values.
 - ... Needs arise from a lack of something considered necessary for survival. For example, eating sustains life, reduces hunger, and fulfills the psychological need for food.
 - ... Desires arise to satisfy wants (for food, warmth, acceptance, status) and may not be necessary for survival; they push people toward satisfaction of wants, but may be suppressed. For example, the desire for chocolate may stem from a want to eat something sweet. The desire for lobster may stem from a wish for status.
 - ... A preference can be thought of as liking something. Preferences, for example liking spinach better than broccoli, do not require justification.

Ask students to work in groups to generate a series of goals from everyday life that relate to getting food and are increasingly broad in scope. They should share examples with the class.

Selecting valued ends food lab. Use this lab to help students identify valued ends that influence the food selections of individuals and families. Begin as a large group by listing answers on the chalkboard to the following question: What should individuals and families take into consideration when selecting food? Next, tell each lab group to select and prepare a food that reflects a valued end, such as

- families ought to save money.
- time is the most important factor to consider when buying foods.
- families ought to eat nutritious foods.
- attractive food has more appeal.

Before sampling the foods, have each group tell the class the food they selected and which valued end their food represents. Use support material ■ D.1 to help students evaluate their food selection.

Suchman's inquiry strategy, as described in *Models of Teaching* by Bruce Joyce, Marsha Weil, and Beverly Showers (1992), will help students investigate and understand how having different goals influences the way individuals and families obtain food. See support material ■ D.2 for an activity using this strategy.

Write stories about food motives. Use the following activities to assist students in writing personal stories that illustrate differences between a food-related need, desire, preference, and value. Begin by reading the case study in support material ■ D.3. Use the accompanying questions to identify food-related motives. Divide students into four or eight groups, and assign each group a different food-related need, desire, preference, or value. Ask each group to develop a list of their concept's characteristics on newsprint and to share ideas about the concept with the large group. Help students compare and contrast the concepts by asking the following:

- How do needs differ from food motives?
 - Do we all have the same food motives? Why or why not?
- Next, read a children's story to students. Some good choices are *Bread and Jam for Francis* by Russell Hoban (1992), *Arthur's Christmas Cookies* by Lillian Hoban (1972), or *The Little Red Hen*, a folktale by Walt Disney Golden Books. Ask the following questions to help students think further about writing their stories:
- How is the children's story similar to the case study ■ D.3? How is it different? How is it different from a poem?
 - What are the characteristics of a story?

— These motives push and pull people into action; conflict among these motives is inevitable.

► Teacher note: Characteristics of a story include a logical, flowing sequence, details about the context, a personal frame of reference, and a specific time frame. More information about the storytelling strategy can be found in the chapter "Stories and Theories" from Robert Coles' (1989) *The Call of Stories*, "Stories: The Heart of Enchantment" in *From Wonder to Wisdom* by Charles Smith (1989), and "Patterns and Stories" in *To Think* by Frank Smith (1990).

Now have each class member write a story by assigning one-fourth of the class to write a story about a food-related need (for example, starvation or intravenous feeding). Another one-fourth of the class writes about food desires (for example wanting food when the stores are closed or craving chocolate while on a diet). Another one-fourth of the class is to write about food values (for example concern about packaging that cannot be recycled or about the appearance of school food). The last one-fourth of the class writes about a food preference (for example preferring chocolate to salad or preferring convenience food to homemade food).

When students share these stories, encourage them to show how the stories reflect the characteristics of a food motive. The following directed activity is based on the analogy of how food motives are like leavening agents in food products.

The push-pull lab. Use this lab to develop the analogy between scientific principles in food preparation and food-related motives. How is the pushing and pulling conflict of different food motives similar to the action of leavening agents? Ask students to look up definitions of *push* and *pull* in the dictionary. *The American Heritage Dictionary* states that to push is "to exert force against an object" and to pull is "to apply force to so as to cause or tend to cause motion toward the source of the force" (1985).

Begin by asking students to give examples of a child being pushed (for example pushed on a swing, pushed into doing something, pushed into a swimming pool).

- What does it mean to be pushed?
- What is involved in pushing?
- What is involved in pulling a wagon? Pulling plants out of the ground? Pulling teeth?
- What is involved in being attracted to or seeking something?
- How are pushing and pulling different and similar?

Select food products that are made with various types of leavening agents, such as muffins, baking powder biscuits, yeast pizza dough, or cream puffs. Ask students to gather information regarding the key ingredients and the role of the ingredients in the food products. Share information and record findings using the chart in support material ■ D.4.

— *Values are not the same as value judgments.*

... *Values are criteria or standards people use to judge worth. They are used whenever alternatives exist.*

... *Value judgments are conclusions people draw about what to believe or do. They are based on facts and values. Values are evident in the reasons people give to support their judgments.*

— *Alternative ends or goals should be evaluated by individuals and families for their appropriateness and reasonableness.*

Have students work in groups to prepare one of the food products. After the lab, review the chart in ■ D.4. Record additional information to complete the chart. Then discuss the question, Which ingredients pushed and which ones pulled to create each food product?

Identify the scientific principles involved in preparing the food products. Using the comparison chart in ■ D.5, compare these principles to food-related motives that push and pull people in their everyday lives.

Making food judgments. Use the think sheet (see support material ■ D.6) to help students understand the difference between the judgment and the criteria used to make the judgment. Ask them to exchange ideas and to provide their own examples from everyday life to illustrate the differences involved.

► Teacher note: Possible answers to the think sheet are

1. Exploiting migrant workers is undesirable. (Answer given)
2. Eating candy bars is unhealthy.
3. People should grow food in gardens, buy food in bulk, or choose biodegradable or recyclable packaging.
4. Eating fruits with pesticide residue is unhealthy.

Vague scenario. The vague scenario experience in support material ■ D.7 is designed to help students recognize that it is difficult to make reasoned judgments without thinking about ends or goals. Have students read the vague scenario in ■ D.7 and as a group discuss the questions posed in the support material. During the discussion, identify more specific goals individuals and families use in addressing the common concern of getting food. Encourage students to question the reasonableness and appropriateness of the goals identified.

Food-getting situations. Next, explain to students that ideas contained in the vague scenario might apply to several different situations related to getting food. Some of these ideas are represented in the case examples that describe the food-getting situations of five different people. Assign one case example from support material ■ D.8 to each small group of students. Tell students to read the case example and to individually answer the open-ended reaction statements in support material ■ D.9. Then, have students work in small groups to answer the questions in support material ■ D.10.

Finally, ask each group to present a skit to the large group. Each skit should depict the perspective on getting food that is represented in its case study. After all groups have made their presentations, use the following questions to summarize thoughts and draw conclusions:

- What similarities exist between the cases?
- What differences exist?
- What factors influence the way in which individuals get food?

▼ Individuals and families can make reasoned judgments about which ends or goals are best to pursue in getting food.

The process of making reasoned judgments includes the following:

- *Make explicit the question or judgment to be made. (For example, everyone ought to be concerned about the interdependent relationships involved in getting food.)*

- What are some common motives that individuals have in regard to getting food?
- How does a person's goals influence the decisions he or she makes about getting food?

To complete this activity, ask students to think about the following question: If these are some possible ways of getting food based on goals, how could one determine which goals are the best to pursue, most appropriate, and reasonable guides to action? Ask students to think about the question, but do not ask for an answer at this time. The question will come up again later in the module.

Making food choices. Use the teacher reference in support material ■ D.11 as a guide to presenting a mini-lecture on the intellectual and social skills involved in making reasoned judgments. The format for Beyer's Directive Strategy (Beyer, 1987) was used to organize the support material. It includes the following steps: (1) introducing the skill, (2) explaining the skill, (3) demonstrating the skill, (4) reviewing what was done, (5) applying the skill, and (6) reflecting on the skill. This strategy provides a rudimentary procedure for teaching the process of making reasoned judgments. In module E, students have a greater opportunity to develop the social and intellectual skills involved in making reasoned judgments. To help students connect concepts in this section to previous learning, refer back to support materials on Developing Perspectives, ■ B.14, and Alternative Food Consumption Patterns, ■ C.27 and ■ C.28, all of which focus on aspects of argumentation. The rudimentary procedure for making reasoned judgments described in the mini-lecture provides basic steps from which teachers can introduce variations and work to extend the procedure outlined in the conceptual statements on pages 172 to 174.

Following the mini-lecture, ask students to apply the skill again by practicing the process of making reasoned judgments. Use the jigsaw reading strategy described in ■ D.12 to read the story, "How Our Food Choices Affect the World." Help students identify the judgments contained in the article, the reasons given to support these judgments, the point of view from which the article is written, and different perspectives on the topic. Expect students to be confused about the concept interdependence.

Teachers can use artwork, graphics, and images to convey major concepts in judgments. Display a picture that represents the author's main value judgment: Everyone should be concerned about the interdependent relationships involved in getting food. For example, ask students to interpret a picture of a garden. Next, show a picture of a supermarket. Ask what value judgment might an individual or family who get their food from a supermarket be making. Encourage students to explore different possibilities using the article in ■ D.12 as background information. Ask students to suggest ways Sarah's food choices and actions might affect others. Explain how this illustrates the notion of interdependence. Build on expected student

Conceptual Statements

- Clarify and define major concepts. (For example, interdependent relationships means...)

- Give reasons to support the judgment. (For example, everyone ought to be concerned about the interdependent relationships involved in getting food because...)
- Identify reasons as factual or value claims. Test their adequacy.
 - ... Factual claims (empirical statements) are tested for relevance and accuracy.
 - ... Value claims (statements about standards of worth) are justified by examining the probable consequences or implications they have for survival and the quality of life.

Directed Activities

confusion about the meaning of interdependence to encourage them to investigate the meanings of related terms in the next directed activity.

At this point, encourage students to explore the importance of clarifying major concepts, the next step in the reasoning process. What might happen if people use different or fuzzy concepts in reasoning?

Interdependence, dependence, and independence. To clarify the concepts in the author's main value judgment in ■ D.12, ask students to create a simple diagram that illustrates the difference between being dependent, interdependent, and independent, or draw three different sets of circles on the board and ask students to think about how the circles represent the three types of relationships. See support material ■ D.13, part 1.

Next, divide students into small groups to read and discuss the interdependency case examples in support material ■ D.13, part 2. Within their groups, ask students to discuss the characteristics of interdependency and to make the case examples depict independently and dependently obtaining food. Then, as a part of a large group discussion, have students generate examples from their own lives of independent, dependent, and interdependent ways of getting food. Follow up by asking

- How are independence, dependence, and interdependence related to getting food?
- What is an interdependent relationship?

Pizza/shoe analogy. In order to stretch student thinking about the complex nature of interdependent relationships, this activity focuses on the creative use of analogies. In comparing pizza and shoes, students learn the interdependent relationships involved in selling, producing, and using those items. See support material ■ D.14.

Food and interdependent relationships. Use the words *food* and *interdependent relationships* in a sentence to answer the following question: Why study about food and interdependent relationships? Remind students that making a reasoned judgment involves first making the judgment explicit and then clarifying the main concepts embedded in that judgment. The third step is to give reasons to support the value judgment. (See conceptual statements on pages 172 to 174 the complete process.) The following directed activities were designed to enhance student skills related to identifying factual claims and value claims, two types of statements used in making reasoned judgments.

Concept analysis of factual claims. Using the concept analysis strategy, ask students to note differences between factual and value statements. Next, explain that there are 11 statements on the concept analysis handout, support material ■ D.15. Some of the statements are labeled *yes*, which means those statements are examples of the concept of factual claims. The *no* statements are not

- *Resolve differences in values, including intrapersonal and interpersonal conflicts that arise in the reasoning process. Use the role exchange and the universal consequences test.*

... *In the role exchange test, one imagines being in the place of the people most disadvantaged by application of the value principle. The value judgment is accepted or rejected from this perspective. What is it like to be in this role? How does it feel?*

... *In the universal consequences test, one considers what would happen if everyone held these values. The judgment is accepted or rejected in light of these consequences. What would happen if everyone did that? How would you like it if everyone did that?*

- *Identify the point of view underlying the reasons given to support the value judgment. In reasoning about values, principles of justice, reciprocity, and concern for others are given priority.*

examples of the concept, but will help in discovering the idea. The students are to read each of the statements to themselves, noticing which ones are labeled *yes* and which ones are *no*. Encourage the students to notice and to identify how all the *yes* statements are alike and how all the *no* statements are different from the *yes* statements. Then ask students to decide which of the last four statements are *yes* and which are *no* and label them as such.

In small groups, have students share how they labeled the last four statements and explain why they were labeled that way. Ask, What makes the statement similar to the other *yes* statements? What term might be used for the *yes* statements? How are the *no* statements the same? What term might be used for the *no* statements? Then ask them to create two new factual and two new value claims, placing them at the bottom of the worksheet.

Making claims in everyday life. Assign the worksheet in support material ■ D.16 to assist students in recognizing factual and value claims used to support the judgments they make on a daily basis. Afterward, students should share ideas to clarify the characteristics of factual and value claims and the differences between the two. Next, ask students to write a sentence summarizing the discussion.

The gift box lab is designed to involve students in a role-reversal experience. In it, students identify factual and value claims a person in a dependent situation might make. It also helps students understand what it might be like to be a family receiving donated food. Ask students the following questions:

- What does it feel like to be in this role?
- What might happen if a gift box was the only means used to alleviate hunger?

In lab groups, ask students to assume that they have just received this box of food. See support material ■ D.17 for contents of the gift box. Their job is to prepare a meal using these foods in a creative way. The purpose of the lab experience is to identify the factual and value claims involved in preparing and eating this meal. Also, it helps students connect ideas they have been learning to the larger notion of taking someone else's perspective and the importance this has in the reasoning process.

Ask students to complete the gift box think sheet, support material ■ D.18. After students have completed the think sheet, discuss the possible meanings of gift giving to giver and receiver. Remind students that the step of identifying factual and value claims that support a judgment is followed by examining points of views of the statements.

The controversial food lab is designed to help students identify and compare the different sides of a controversy. This is done to assist students in understanding the relevance points of view have

in assessing statements that support or refute judgments. Introduce the lab by explaining the importance of collecting data about the controversial food from different perspectives, including personal experience as a source of information in making judgments about what to believe and do.

► **Teacher note:** It is important to select a food for which students can find multiple points of view about its use. Use local community norms and state guidelines on teaching controversial issues in helping students select which controversial food to investigate (appendix E provides suggestions for teaching controversial issues). Read the teacher reference material in support material ■ **D.19** before the lab for some examples of controversial foods and strategies for conducting follow-up activities.

In lab groups, have students prepare and sample foods prepared using the same controversial ingredient. After sampling the foods, ask students to reflect upon this lab experience, writing a short paragraph describing what they learned. The writing activity may be organized using the following sentence stems: I've become aware..., After some reflection, I've decided..., I'm proud of myself because...

After the lab, discuss some other ways of obtaining information about food. Ask students to collect statements about the controversial food from a variety of media. You may want to provide materials in class for student browsing and viewing. Ask the librarian for help in securing an adequate selection. As a class compile the students' list of statements and sources. Avoid reacting to any of the statements listed. To extend student learning, see the activities and references in support material ■ **D.19**.

Using support material ■ **D.20**, introduce the concept of points of view. Since students are bombarded with factual and value claims from a variety of sources, it is important to help them distinguish two senses in which statements represent points of view. Any statement about beliefs and practices can be examined from the point of view of the individual or group making the statement and from the point of view reflected in the statement.

Working in small groups, ask students to identify factual and value claims contained on their list of statements about the controversial food. Then consider the claims from different points of view, using the following questions:

- Who is making this claim? Is this a credible source? How can you tell if something is biased?
- What point of view is reflected in the statement (such as aesthetic, intellectual, prudential, or ethical)?

The reasoning is judged on whether the conclusions follow from the reasons given.

If the facts supporting the judgment are accurate and genuinely relevant, if the values withstand the role exchange and universal consequences tests, and if the reasoning is sound, then the judgment is considered acceptable.

Certain social skills are used when reasoning about values.

- *Communicative interaction is used to clarify meanings and to probe for underlying reasons.*
- *Perspective taking explores how different people would view particular events, conditions, or elements of the situation.*

Help students summarize their findings by asking

- Why is it important to understand and examine our own and others' perspectives (such as manufacturers, the Food and Drug Administration, consumer advocates)?
- What role do you think points of view have in making and justifying value judgments?

Next, recall the question that was raised in the food-getting situations: How do people determine which valued end is the best, the most appropriate, or the most reasonable guide to action? Ask students to discuss this question in small groups.

► **Teacher note:** The answer is by using the process of making reasoned judgments. Ask students to elaborate on this idea. The previous activities in module D have focused on helping students understand the process of making reasoned judgments. It is appropriate at this point to pause to check students' progress in understanding the reasoning process. Use information obtained from student discussion in deciding whether review is necessary. Remember that the rudimentary procedure for making reasoned judgments described in ■ D.11 provides basic steps from which teachers can introduce variations and get into the extended reasoning process identified in the conceptual statements on pages 172 to 174.

Mock trial. Finally, use the simulated trial proceedings as a way to connect student learnings and practice the process of making reasoned judgments. In the mock trial, participants are asked to give reasons to support judgments, and to assess another's statements and reasoning. See support materials ■ D.21 and ■ D.22. After the verdict, follow-up by asking students to summarize the implications of the trial, especially as it relates to the process of making reasoned judgments.

Conceptual Statements

▼ *Many contextual factors affect the individual's or family's ability to pursue valued ends.*

Availability and use of scarce resources influence access to a safe food supply.

- *Resources used to achieve a safe food supply include time, energy, money, and abilities.*
- *Sometimes the amount and kinds of available resources are beyond an individual's or family's control.*

Control by government and corporations may limit or prevent access to a safe food supply.

- *Countries may use food for political purposes, such as when countries give food assistance as a reward to other countries for certain actions.*
- *Government distribution of food is another means of controlling access to food, such as rationing and distribution of surplus farm commodities.*
- *Consumers may find a product is no longer available because the manufacturer chose to remove a low-profit item from the market in favor of one that will make a higher profit.*

Food processing and handling also influences the family's ability to secure a safe food supply.

The way the consumer obtains, stores, and uses food is another contextual factor.

- *When food is not stored properly, it spoils.*
- *Food poisoning may result from improper handling of food.*

▼ *Consumer choices on how to obtain, store, and use food have consequences for families and societies.*

Directed Activities

Storytelling. There are a number of factors that affect the family's ability to accomplish valued ends. The next series of activities will focus on the judgment "Everyone ought to have access to a safe food supply." This value judgment is used to illustrate contextual factors. Read the story, "Living on Less Than \$100 a Year," in support material ■ D.23. Then ask students to work in pairs to complete the worksheet about the contextual factors affecting access to a safe food supply. See support material ■ D.24.

Contextual factors affecting access to a safe food supply. Be sure to read the contextual factors found in the conceptual statements. These statements give examples that could suggest additional experiences and resources for students. Refer to the points of view definition sheet in support material ■ D.20 and help students identify judgments for safe and unsafe food from many points of view. Students might recognize or identify with examples such as spoiled food or food poisoning. These examples might be used as answers to questions in support material ■ D.24.

Alternative means to achieve a safe food supply. Ask students to gather information regarding alternative means to achieve a safe food supply. Discuss different ways students might obtain this information. For example, they may get information from a video or from a guest speaker. Additional resources on food safety are provided in the Family Narrative and in appendix A. After they have an opportunity to examine resources, ask students to organize

Conceptual Statements

Individuals and families generate alternative means to reach their goals.

Choosing among alternative courses of action involves considering which alternative is most likely to produce the best set of consequences.

- *Each alternative might influence people in positive or negative ways.*
- *Since people's lives are interdependent, it is important to think about the consequences of the alternative on all parties involved in the situation.*
- *All perspectives are treated equally unless there are relevant differences.*

Probable consequences of alternative action strategies are evaluated in light of ends or goals and the context in which the food concern arises.

Directed Activities

their data using the chart provided in support material ■ D.25. Walk the students through one example. After they have completed the chart, assist students in generalizing from this experience about the intellectual processes used in generating and evaluating alternatives. Refer to conceptual statements. Also, see J. Fraenkel (1980) chapter 5, "Teaching Strategies for Developing Thinking," or S. Brookfield (1987) chapter 7, "Techniques for Developing Alternative Ways for Thinking: Intellectual Processes Used In Generating and Evaluating Alternatives."

Talk show. Conclude with the talk show (support material ■ D.26). As one way to summarize learning, ask students to identify the points of view represented and the thought processes used during the show.

Valued end represented: _____

- If so, which one(s)?

Suchman's Inquiry Strategy

Directions to teacher: See examples of puzzling situations found in *National Geographic*, such as the following ones. In "Honey Hunters of Nepal," (November 1988, pp. 660-671), men gather honeycombs despite the fact that they risk their lives, deface the jungle, and contribute to the insects' decline. The men value working in the jungle as their ancestors did and enjoy the challenge of gathering a product that can be used, exchanged, or sold. In "Nest Gatherers of Tiger Cave," (January 1990, pp. 106-133), men risk their lives to obtain a prized commodity, edible bird's nests, an essential ingredient in a traditional Chinese soup. The product brings the nest gatherers great profits because it is a delicacy and is used for medicinal purposes.

Especially note the pictures on page 667 of the November 1988 issue and page 125 of the January 1990 issue. These pictures depict puzzling situations that could be interpreted in many ways yet represent the big idea that the way families obtain food is influenced by the goals or values that they hold. Use Suchman's Inquiry Strategy on pages 199-204 of *Models of Teaching* by Joyce, Weil, and Showers, to help students interpret the pictures. Tell students that you are going to show them two pictures depicting puzzling situations, yet both represent one big idea. After the students examine the pictures, they are to gather information by asking the teacher yes-or-no questions. Encourage students to talk to one another while generating questions. They are to continue gathering information until they can give a one- or two-sentence explanation of the puzzling situation. This type of activity helps students develop a thinking process that will assist them in solving puzzling situations in their everyday life.

One explanation of the pictures is as follows: The way individuals and families obtain food is of concern because they have different valued ends.

After the students have explained the puzzling situation, have them think about the situation and the thinking process they used by responding to the following questions:

- What were the valued ends of the people depicted in these situations?
- How do their valued ends differ from yours?
- Initially, it seems unusual to put oneself in danger to get food. What are some examples of people putting themselves in danger to get food?
- What kind of information did you try to gather with your questions?
- What ideas were the most helpful in arriving at the explanation?
- What alternative explanations are possible?
- When do you use this thinking process to solve puzzling situations?

A Story About a Food Value

Jennie's clock radio came on with the 9:30 news.
"Actor Danny Ludlow died of a heart attack early this morning."
The words jolted Jennie awake.
"Not another one," she yelled and threw her pillow at the radio.
This was not a good way to start the morning.
Jennie padded into the kitchen.
"It's grapefruit, toast, and skim milk for me," she said, glowering into the refrigerator.
She didn't notice her new roommate Amy grating cheese at the counter.
"That's what you always have," Amy said. "It's Saturday. Live a little. I'm making bacon and scrambled eggs with cheese. Let me make some for you."
"No," Jennie said automatically.
"Come on, smell that bacon frying. You know you want some."
"Do you want to kill me?" Jennie exploded.
"What?" Amy said, incredulous. "I only offered to make you breakfast."
"I'm sorry I snapped at you," Jennie said. "When you moved in, I thought I mentioned that I've got a cholesterol problem. I have to be really careful about what I eat."
"You're so serious about it," Amy chided. "One bacon-and-egg breakfast couldn't hurt that much. You're young."
Jennie's expression didn't brighten. She hated this argument, and she'd had it so many times before.
"Everybody should watch their cholesterol," Jennie said. "You hear about heart disease mostly in older people, but now is the time to set healthy eating patterns."
"I used to eat like you, Amy. Anything I wanted, fried cheese curds, pork chops, eggs for breakfast every day."
"But last year my uncle died of a heart attack."
"That is so scary," Amy said.
"It's hereditary," Jennie said. "Some people are more susceptible to heart disease. After my uncle died, everybody in my family went in for screening. The doctor told me my cholesterol was way too high."
"I'm sorry, Jennie. That was really thoughtless, me trying to tempt you with eggs and bacon."
"It's not that I like eating dry toast every morning," Jennie laughed. Then she turned serious. "Amy, I watch what you eat, and I think you should get your cholesterol level checked, too."
"I suppose it wouldn't hurt to know what it is," Amy shrugged.
"No," Jennie said. "It might help."
The phone rang, interrupting the conversation. Amy answered it.
"She's right here."
"It's that guy who always needs so much help in biology lab."
"Give me the phone," Jennie laughed.
"Hi Chad."
"No, she's not always like this. Sometimes she sleeps."
Chad invited Jennie to go out for dinner with some of his friends.
"We're getting together at 5:30," he said. "I'll pick you up a little before that."
"I've got aerobics until six," Jennie said.
"Can't you skip it?" Chad asked. "It seems like you go to aerobics every day. You could skip it just this once."
"I don't want to skip it," Jennie said. "I can meet you at the restaurant at 6:15, though."
"That would be OK," Chad said.

The day flew by. Jennie was amazed at how quickly her biology project, laundry, and phone calls filled up her day off.

By 4:30 she needed a break. She was glad she had insisted on going to aerobics.

At the restaurant she felt energized. Chad and his friends were laughing when she walked in. They were dipping breaded shrimp in sauce and betting who would eat the most.

"There's plenty. Dig right in," Chad said.

"No thanks," Jennie said.

"Come on, they're great," Ryan said. Then he pantomimed as if he were in a TV commercial. "Luscious, mouth watering shrimp. Taste."

He dangled a shrimp before Jennie's eyes.

"I really don't want any," Jennie insisted.

Making a heart-healthy choice was harder when the waiter arrived to take their dinner orders and said the special was prime rib.

"It's your favorite," Chad grinned. "I'm getting it."

Jennie's mouth watered.

Prime rib was one of her favorites, but since she'd become concerned with cholesterol, it was on her out list.

She was tempted to order ribs as a special treat, but the news about Danny Ludlow was still in her mind.

"You'll give me a bite?" Jennie checked with Chad.

"Of course," he answered.

"Then I'll have the grilled chicken breast. I'll have the broccoli on the side. Can you please hold the cheese sauce?"

At home that night, Jennie thought about the changes in her life since she found out how high her cholesterol was.

At every meal she was confronted with choices.

"I'm eating for a long life," she often said when she had to forego her favorite foods.

She was trying to find new favorites that fit into her new diet. Every week she bought something new from the produce section. She experimented with new cooking methods. She would steam vegetables inside a big leaf of kale or cabbage and save the water to make soup. She squeezed lemon juice on many foods instead of shaking on salt.

Her new diet was different from the heavy meat-centered meals she'd eaten as a child. She never had gravy or cream soups anymore. Some foods, like prime rib, she missed. But she was happy with the way she felt now.

Making healthy food choices is really hardest in restaurants, she thought. It's almost as if other people want me to eat food that's high in cholesterol, she thought.

Jennie felt good about the changes she had made in her diet, but she was tired of having to defend herself and explain her choices. She thought about the scene with Amy and the way Chad's friends tried to get her to eat shrimp and order steak.

Why do other people want me to eat food that's not good for me? she wondered.

Questions for Thought

- What decision has Jennie made regarding food-related actions?
- What survival needs may be underlying Jennie's food-related thoughts and actions?
- What wants, desires, or preferences are evident in Jennie's food-related thoughts and actions?
- What values are evident in Jennie's food-related actions?
- Why do you think she thinks in this way?
- Do you think this is a true story? Why or why not?

Directions: Before the food lab, complete the following chart using available reference material.

Examples of Food Products	List the Key Ingredients	Identify the Role of the Key Ingredient
Muffins		
Baking Powder Biscuits		
Yeast Pizza Dough		
Cream Puffs		

After the foods lab, complete this question: What ingredients pushed and which ones pulled to create each food product?

Comparison Chart

Directions: Complete the following chart to compare and contrast the scientific principles in food preparation to food-related motives. In the first column, identify a scientific food preparation principle that you observed in your foods lab. In the next column, give an analogy to explain how a food-related motive, such as a need, desire, or value operates in a similar way to the principal you listed. In the third column, explain the difference between the principle and your analogy.

Scientific Food- Preparation Principle	Analogy Using Food- Related Motive	Difference Between Food-Preparation Principle and Analogy

1. Summarize the differences. How are scientific food principles different from food motives?
2. Describe a time when you felt as if you were being pushed and pulled by your needs, desires, or values in choosing _____. (Fill in a food of your choice.)

Comparison Chart

Examples of how the comparison chart might be filled out are provided below in case students need additional help in understanding the concepts of this directed activity.

Scientific Food-Preparation Principle	Analogy Using Food-Related Motive	Difference Between Food-Preparation Principle and Analogy
Steam pushes gluten causing product to rise.	The media pushes people into buying products, such as soda, by appealing to people's need for popularity.	The consequence related to the scientific principle is only related to the food product, while the consequence related to the food motive affects human lives.
Kneading pulls gluten strands.	Personal health values may pull people into purchasing certain food products in order to achieve good health.	The effects of the scientific principle are more predictable than the results of purchasing a particular food because of the variables in achieving good health.

**Making Food Judgments Think Sheet**

Directions: Below is a chart with some value judgments and underlying value criteria. Look at the example and notice that the criterion is given as the reason for making the judgment. Complete the chart by filling in the empty boxes. For number 5, fill in a food judgment and underlying value criterion that you have experienced in everyday life.

Value Judgment	Value Criterion
1. Boycott table grapes.	Exploiting migrant workers is undesirable.
2. Don't eat candy bars.	
3.	People should buy food with the least amount of packaging.
4. Don't buy foods grown with pesticides.	
5.	

Directions: Read the scenario and answer the following questions.

What Am I Doing Here?

I know exactly what I came here for. I am not alone; many others have the same pursuit. Still, I am on my own.

This is such an unsettling place with so much hustle and bustle. Always watch where you are going, move to one side, wait, and wait again. The things I see around me change quickly. New smells fill my nose and noises ring in my ears. I feel rushed, yet I know that I should relax and take my time.

I feel very confused already. What am I going to do? Frustration swells inside me as this takes time, and I encounter many obstacles. There are so many decisions to make. I am really not sure what is *right*. I argue with myself as I make my decisions. What should I do? What would I really like to do? I often feel defeated no matter what decision I make. Why don't I feel in control even though I make my own decisions?

As I walk I observe the others. They seem preoccupied. I wonder if they are thinking the same thoughts I am and experiencing the same feelings. Maybe, maybe not. Sometimes we bump into each other by accident. Very seldom do we speak to each other, only to ourselves. We are each on our own.

Sometimes I leave this place feeling very good and other times not; however, it makes little difference how I feel. One thing I am sure of, I will make this venture again and again.

Discussion Questions

- Where do you think the individual in the scenario is?
- Why are the individuals in this situation?
- What do you think the person is doing?
- Why might the person be confused?
- In what situations have you had similar feelings?
- What food-related situations come to mind as you think about this story?

Food-Getting Situations

1. Jeff, a student at North High School, is standing in line to select a school lunch. He holds the money that is left from the food allowance his dad gave him at the beginning of the week. As he waits impatiently, he notices that the menu choices today are a hamburger and french fries or the salad bar.
2. Harry has just been awakened by the sun filtering through the haze in a Chicago center for the homeless. He is cold, hungry, and stiff after spending the night sleeping on a makeshift cot. Harry mumbles to himself, "If only..." Harry's thoughts ramble back over the past two years since the plant he worked at closed. He is abruptly brought back to reality by the cries of his young child who wants to eat.
3. Grace has walked from her apartment in a housing complex for the elderly to the small neighborhood grocery store. She wishes her son would take her to the warehouse grocery store more often. She can get food at better prices there. She especially likes fresh fruits and vegetables. But they cost too much and aren't always fresh at the neighborhood store. Grace usually buys only a few items because she lives alone and has to carry the groceries herself.
4. Zaratha is an Ethiopian woman with three ever-hungry children to feed. Once every two weeks the government hands out provisions to low-income families. She is waiting in line and hopes they will have enough food when it is her turn.
5. Mary is doing the weekly shopping for her family—her husband, Mike, and their two young children. She chuckles as she looks over her grocery list, noting what Mike and the children have written. Mary does not always agree with their wishes. She wonders if those foods are really healthy and worth the money.



Reaction Statements to Food-Getting Situations

Directions: Working individually, complete the following statements as if the character in your assigned case example is talking out loud about his or her food-getting experience.

I came here to...

I see...

and hear...

I feel rushed as a result of...

I will have to relax and take my time because...

I am confused about...

I wish I weren't bothered by...

I would really like to...

I don't feel in control because...

Other people seem to be...

I feel very good when...

Other times I feel _____ because...

I will probably get food in this way again because...

It is important to me that...

Directions: Working as a group, reread your case examples. Answer the following questions, referring back to the sentences in support material ■ D.9 for help.

- How is the person getting food? (means)
- What are some possible consequences of getting food this way? (consequences)
- What obstacles might this person encounter in obtaining food? (contextual factors)
- What do you think is important to this person? (wants, desires, values)
- Why does this person get food in this way? (valued ends)

Making Food Choices: Mini-lectures

Directions to teacher: The rudimentary procedure for making reasoned judgments described in this mini-lecture provides basic steps to which teachers can add. Directed activities that follow the mini-lecture provide students an opportunity to practice aspects of this process in greater detail.

Introduce Skills

Today we are going to learn about the intellectual and social skills involved in making reasoned judgments. People use these skills in many ways in their everyday life. For instance, as a student, you may have to make a judgment about cheating. In this course, we are making judgments about food. This reasoning process helps people make judgments about what to believe and do and helps them learn how to resolve differences in points of view between themselves and other members of the group that arise during the process.

Explain Skills

Try to remain patient as this process is being introduced and practiced during the first few examples. We will use concrete examples from your everyday life at first to simplify the process. Like any new skill, everything seems difficult and confusing at first. But eventually by the end of this module, these ideas will become more and more familiar to you.

The specific skills being used to make reasoned judgments about food choices are

- Identifying the tentative judgment (or question) to consider.
- Clarifying major concepts.
- Assembling statements that support or refute the tentative judgment.
- Determining whether the supporting and refuting statements are factual or value claims.
- Assessing the factual claims to determine whether they are true or false.
- Clarifying the relevance of the factual claims by identifying the corresponding value principle(s) or value(s).
- Testing the acceptability of the value principle(s) or value(s) underlying the tentative judgment.
- Making a reasoned judgment.
- Assessing the soundness of the judgment.

In order to practice the skills involved, let's start by using a step-by-step procedure. But remember that in reality the process of making reasoned judgments is not a linear, step-by-step procedure. It may be helpful to keep some definitions in mind as we practice these skills. (Use ■ D.11, student reference A to review definitions.)

Demonstrate Skills

We are now going to experience the process of making reasoned judgments using a specific food as an example. (Have a simple food available or have students make a simple food.) You will be asked to make a judgment as to whether or not you would eat this food. Then you will be asked to give reasons to support your judgment.

First, raise your hand if you would eat this food. How many would not eat it? Next, let's make a list of reasons for and against eating this food.

(Examples of reasons to eat the food may include the food is economical or it is home grown. Examples of reasons not to eat the food include the color is dull and gray, it isn't very appetizing, the food is high in calories, or it takes too long to make.)

Now, let's look at each of these statements. Which statements are factual claims? If there are none, ask students to develop a list of factual claims about the food. (Students may want to refer to list of definitions in ■ D.11, student reference A.) Are all factual claims true? Why or why not?

Next we'll explore how to form simple arguments by combining our reasons and judgments about wanting or not wanting to eat the food. For example, You can't tell what's in it, and it doesn't appeal to me, so I don't want to eat it. Using some other everyday food-related examples, try forming some simple arguments of your own. (Help students sort out differences between reasons and conclusions or judgments.)

Now I am going to demonstrate how statements can be grouped to provide a logical set of reasons to support a judgment. (Write the following statements without labels on the chalkboard. Labels are provided here for teacher reference.)

- High fat foods are not good for you and should not be eaten (value claim).
- Foods that contain more than nine grams of fat are considered high fat foods (factual claim).
- These foods contain 15 grams of fat (factual claim).
- Therefore, these foods are not good for you and should not be eaten (conclusion/judgment).

First, using the statements on the chalkboard, let's check our understanding of the different parts of an argument (reasons followed by a conclusion). What types of statements are used in this argument (factual and value claims)? Are all of the judgments we've been making sound? Why or why not? (Help students examine differences, but do not expect fully developed answers to these questions.)

Next, we must identify the underlying value principle(s) or value(s) that make the factual statements relevant to the judgment. For example, if the food contains 15 grams of fat, and the judgment is that the food should not be eaten, the underlying value principle or value is that people should not eat too much fat.

Now we are ready to test the acceptability of the value principle underlying the tentative judgment. Before accepting your initial judgment, the next step is to test the acceptability of the value principle(s) or value(s) underlying the reasoned judgment. To learn how to do this, let's read about the value principles tests, ■ D.11, student reference B. Practice each of the acceptability tests using the following questions as a guide. These questions are phrased in terms of the example we just talked about. (Value principle: High fat food isn't good for you and should not be eaten.)

1. How would you feel if everyone ate foods high in fat and you could only eat low fat food? (role exchange test)
2. What would happen if everyone ate foods low in fat? (universal consequences test)
3. What would happen if someone needed energy quickly and only low-fat food were available? (new cases test)
4. Should people be concerned about maintaining their health? Does our value principle about eating high fat food follow logically from the broader principle of maintaining health? (subsumption test)

Review What Was Done

Let's pause to review the steps we have used so far. State in your own words what some of the steps involved in the process of making a reasoned judgment are. Using our food example, what were some of the reasons given to illustrate each step of the process?

Apply the Skill

Next we will extend our skills by completing ■ D.11, student reference C on factual and value claims. After completing the worksheet, we will discuss those items that gave you the most difficulty and places where there is substantial disagreement about answers. (See the Factual and Value Claims Worksheet Answer Key in support material, ■ D.11, Teacher Key.)

Now let's use the gardening statements from student reference C to complete the Reasoned Judgment Worksheet, ■ D.11, student reference D. Work in small groups to complete the chart. First, identify which statements support or refute the judgment, Gardening is the best method of obtaining food, found at the top of the chart. Finally, separate the supporting and refuting statements into two additional categories, identifying which statements are factual claims and which are value claims. Record the statements in the appropriate columns.

Reflect on the Skill

We will reflect on the skills involved in making reasoned judgments by discussing the following questions:

- What steps have we used in making reasoned judgments?
- What are some rules to keep in mind when using the reasoned judgment process?
- Under what circumstances is it appropriate to use reasoned judgment?
- How is this type of reasoning related to other intellectual skills, such as concept analysis and detecting bias?
- Now that you have practiced making reasoned judgments, how would you define reasoned judgment?
- What two examples illustrate how reasoned judgment might be used in your own life? As a family member? As a student in school situations?

Definitions of the Reasoned Judgment Process

Value question: A concern of the family about what to believe or do. Food becomes a value question when people evaluate the wisdom and ethics of their food choices. An example of a value question is, Should our family/community buy grapes harvested by exploited workers in Chili?

Value or value principle: A criterion, standard, or principle for judging worth that enters judgment whenever alternatives exist. For example, we should give equal consideration of the rights of all interested parties. Some authors distinguish between a value criterion that is brought to the context of value decision-making and a value principle that emerges as a product of that decision.

Value claim: A statement that asserts that some person, object, idea, action, or situation is good, worthwhile, desirable; or, on the other hand, bad, worthless despicable; or, of course, somewhere in between the extremes. For example, it is bad to exploit workers. Value claims are justified by examining the probable consequences of upholding certain values and by appealing to basic values related to survival and quality of life.

Value judgment: A conclusion about the wisdom or ethics of a particular choice or action made in response to a value question. The value judgment typically does not state the values being applied, but values are evident in the reasons given to support the judgment. For example, as protest against exploitation and to show support for the workers involved, people should avoid buying grapes harvested in Chile.

Value object: The goal, object, event, or condition being judged in the value claim or value judgment. For example, buying grapes and exploitation of workers.

Value term: The words used to indicate the worth of the value object, for example, *bad* or *should not*.

Factual claim: A statement about experience that is determined to be true or false on the basis of observable evidence. For example, grapes are grown in Chile. In ordinary language use, a *fact* is true, but in reasoning *factual* describes the nature of the statement, thus the statement itself may be either true or false.

Point of view: The perspective from which something is evaluated. For example, the ethical point of view is that workers should be paid fair wages; whereas the free market economic point of view is that workers should be paid only what the market requires, even if that is not a living wage.

Reasoned judgment: The conclusion of an argument is accepted as sound when the reasons and the conclusion are true *not* false and the reasoning to conclusion is valid and follows from the reasons given.

Value Principles Test

These tests can help determine the acceptability of the principle implied in the tentative value judgment.

Role exchange test. Ask yourself if you would be willing to trade places with someone adversely affected by the judgement and action being evaluated. Decide to accept or reject the value judgment and its action in light of these circumstances.

Universal consequences test. Ask questions like, What would happen if everyone did that? or How would I feel if everyone did that? Accept or reject the value judgment in light of common consequences that would occur from the value judgment and action.

New cases test. Apply the principle used in one value judgment to a similar case. Accept a principle only if you can accept all the judgments that may occur from applying the principle.

Subsumption test. Accept the specific value principle only if it follows logically from a more general, acceptable value principle. If the general value principle is unacceptable, reject the specific value principal and reconsider the value.

It is up to you to choose the appropriate tests for the value principle being tested.



Factual and Value Claims Worksheet

Complete the worksheet by writing V for *value* in the space before the value claims and F for *factual* in the space before the factual claims. Also, circle the value term and underline the value object of each value claims.

- ___ 1. Buying foods at a farmers' market requires travel time.
- ___ 2. Buying foods at a farmers' market supports local farmers.
- ___ 3. Everyone ought to have a job.
- ___ 4. Gardening is a leisure time activity.
- ___ 5. Supporting local farmers is important.
- ___ 6. Foods grown with pesticides should not be eaten.
- ___ 7. Gardening provides a learning experience for family members.
- ___ 8. Whatever takes less time and energy ought to be done.
- ___ 9. Planting a garden adds color and variety to surroundings.
- ___ 10. It is less expensive to buy fruits and vegetables at the farmers' market than growing them yourself.
- ___ 11. Expending physical energy is good.
- ___ 12. Convenience is the most important factor to consider when securing food for a family.
- ___ 13. Exploitation is bad.
- ___ 14. It takes less time and energy to buy fruits and vegetables at the farmers' market than growing them yourself.
- ___ 15. Foods sold at farmers' markets are grown without pesticides.
- ___ 16. Gardening takes time away from doing other activities.
- ___ 17. Gardening requires physical energy.
- ___ 18. There is an initial cost for gardening supplies and materials.

- ___ 19. Garden-grown foods are nutritious.
- ___ 20. Creating a colorful and beautiful environment should be pursued.
- ___ 21. Education and learning experiences that promote learning are good for family members.
- ___ 22. Supermarket profits are an important part of a community's resources.
- ___ 23. People ought to eat nutritious foods.
- ___ 24. Families ought to save money.
- ___ 25. Purchasing supermarket foods increases the profit of supermarkets.
- ___ 26. People should have a variety of interests and activities.
- ___ 27. Everyone must participate in activities that add to self-worth.
- ___ 28. Buying fruits and vegetables at a supermarket provides jobs for people.
- ___ 29. Leisure time activities are important.

Factual and Value Claims Worksheet Answer Key

F = Factual claim

Bold = Value terms

V = Value Claim

Italics = Value object

- F 1. Buying foods at a farmers' market requires travel time.
- F 2. Buying food at a farmers' market supports local farmers.
- V 3. Everyone **ought** to have a *job*.
- F 4. Gardening is a leisure time activity.
- V 5. *Supporting local farmers* is **important**.
- V 6. *Foods grown with pesticides* **should** not be eaten.
- F 7. Gardening provides a learning experience for family members.
- V 8. *Whatever takes less time and energy* **ought** to be done.
- F 9. Planting a garden adds color and variety to surroundings.
- F 10. It is less expensive to buy fruits and vegetables at the farmers' market than growing them yourself.
- V 11. *Expending physical energy* is **good**.
- V 12. *Convenience* is the **most important** factor to consider when securing food for a family.
- V 13. *Exploitation* is **bad**.
- F 14. It takes less time and energy to buy fruits and vegetables at the farmers' market than growing them yourself.
- F 15. Foods sold at farmers' markets are grown without pesticides.
- F 16. Gardening takes time away from doing other activities.
- F 17. Gardening requires physical energy.
- F 18. There is an initial cost for gardening supplies and materials.

- F** 19. Garden-grown foods are nutritious.
- V** 20. *Creating a colorful and beautiful environment* **should** be pursued.
- V** 21. *Education and learning experiences that promote learning* are **good** for family members.
- V** 22. *Supermarket profits* are an **important** part of a community's resources.
- V** 23. People **ought** to eat nutritious foods.
- V** 24. Families **ought** to save money.
- F** 25. Purchasing supermarket foods increases the profit of supermarkets.
- V** 26. People **should** have a *variety of interests and activities*.
- V** 27. Everyone **must** participate in *activities that add to self-worth*.
- F** 28. Buying fruits and vegetables at a supermarket provides jobs for people.
- V** 29. *Leisure time activities* are **important**.

Reasoned Judgment Worksheet

Directions: Using the statements 1-29 from the Factual and Value Claims Worksheet in ■ D.11, student handout C, pair up as many supporting and refuting statements as you can find related to the tentative reasoned judgment, Gardening is the best method of obtaining food. Then separate the factual claims from the value claims. Fill this information in the appropriate columns below.

Tentative reasoned judgment: Gardening is the best method of obtaining food.

<i>Supporting Statements</i>		<i>Refuting Statements</i>	
Factual Claims	Value Claims	Factual Claims	Value Claims

- What ideas were the most helpful in arriving at the explanation?
- What alternative explanations are possible?
- When do you use this thinking process to solve puzzling situations?

How Our Food Choices Affect the World

Note to teacher: This story contains controversial issues. Teachers should consider community norms in deciding to use this material. Use is a voluntary, local decision. Appendix E provides additional guidance on teaching about controversial issues.

The story was selected as typical of the kind of material young people encounter in the popular media and provides a rich source for examining and evaluating parts of the judgment process contained in the story. Thus, emphasis is on making reasoned judgments and not on the content. The material can be used to identify and test the soundness of the value judgments in the article, identify and test the adequacy of the reasons given to support these judgments, identify the point of view from which the article is written, and identify different perspectives on this topic.

This article provides an opportunity for students to build media literacy skills. In the Fall 1995 special supplement of *Telemedium*, David Considine (1995) discusses the what, why, and how to's of media literacy. He defines media literacy as "the ability to access, analyze, evaluate, and communicate information in a variety of formats, including print and nonprint." Several articles on the role of the family in media literacy can be found in the Spring 1995 issue of *Telemedium*.

Use the jigsaw reading strategy to facilitate reading. Divide students into four to six investigative teams, and assign them each a section of the article starting with the introduction. Teachers may elect to delay reading of the last two sections, which are revisited when the class explores the concepts of interdependence, dependence, and independence. Ask students to read the assigned segments independently and then discuss the following reading questions: What are the author's main points? What reasons are given to support these points? What are some questions you would like to ask to clarify the concepts and thinking in this section? Help students see how these same questions can be used to examine any print or nonprint material.

Next, ask one student from each team to act as reporter and summarize each section to the large group. For an interesting variation to oral reporting, ask students to draw pictures on newsprint to represent the ideas in their section. After each group has presented their findings, as a large group discuss the following questions: What was the purpose or goal in writing this article? What question or issue is the author trying to confront or resolve? What information is used to support or defend the point of view or position taken in the article? What assumptions underlie this position? What are the consequences of accepting or adopting this position?

Because of the importance of maintaining balance, encourage students to explore the question: Is there another way of thinking about food choices? As a final step, ask students in each investigative team to watch for and collect information about their topic from a variety of media. Teachers may want to provide some sources of information in the classroom. Some references related to this topic are listed in chapter 2, support material ■ D.19, and appendix A.

The agriculture and social studies teachers can be consulted about other resources and ways to integrate investigations of these issues. Also, the library media specialist can help students identify potential sources of information on each topic.

How Our Food Choices Affect the World

By Ronald E. Kotzsch. Reprinted from *East West Natural Health: The Guide to Well-Being*, June 1985, Box 1200, 1700 Station Street, Brookline Village, MA 02147. All rights reserved. Reprinted by permission of the author.

Directions to students: The author of this story presents an argument about how our food choices affect the world. Your task is to identify the judgment(s) in your section and to consider the adequacy of the reasoning to support the judgment(s). Use the following questions as a guide to discussion, and be prepared to report your findings to the large group. What are the author's main points? What reasons are given to support these points? What are some questions you would like to ask to clarify ideas discussed in this section?

Introduction

Sarah J. is a bright young lawyer with an interest, both personal and professional, in ecological and wilderness issues. She works for an environmental organization at far less pay than she would receive elsewhere. On a typical day she prepares a complaint against a factory that is polluting a local river, solicits donations for the World Wildlife Fund during her lunch hour, and before leaving work, sends a contribution to Oxfam to help with famine relief in Africa.

On her way home, Sarah stops at the supermarket. She buys cereal, milk, eggs, bananas, coffee, cheese, and whole wheat bread. Though she eats little meat, she buys some inexpensive chopped beef for her dog. She notices some apples labeled "local—organically grown," but decides they are too expensive and too spotted. Sarah chooses several cosmetically perfect apples instead and pops them into a polyethylene produce bag.

Sarah arrives home tired, but satisfied she has made a contribution to the present and future well-being of the planet. And indeed, through her work, her volunteer activity, and her financial contribution she has done so. But she has affected the world negatively as well, in ways she did not intend and does not suspect....

Almost 15 years ago, Frances Moore Lappé pointed out that our dietary choices are not purely personal ones, that they affect not only ourselves but our society and the whole planet. In her landmark book, *Diet for a Small Planet*, Lappé focused on the fact that Americans, because of their meat-based diet, consume an inordinate portion of global food resources. Suggesting that this regime contributes to food scarcity around the world, Lappé encouraged people to adopt a low-meat diet based on grains, seeds, nuts, vegetables, fish, and dairy foods. Many followed her suggestions.

Lappé and others have since observed that our dietary choices affect not only the global food supply, they also influence environmental, social, economic, and even political conditions around the world. When we purchase a particular food, we give our tacit approval and support to those who produced it and brought it to the supermarket shelf. As Lappé puts it, "Every decision we make about food is a vote for the kind of world we want to live in." Yet even people with genuine humanitarian and ecological concern seldom have a clear idea of the impact of their dietary choices. A look at some of the foods we Americans commonly use, and at the kind of world we vote for when we buy them, is instructive and perhaps surprising.

Note to students: In addition to the questions you have been asked to consider, think about some ways in which food choices in the supermarket are ethical choices. For example, the author suggests that through her food choices, Sarah has unwittingly affected the world. How might Sarah's food choices affect the world?

Meat

Eating meat involves the killing of animals, a fact of which many meat-eaters are often unconscious. A single visit to a slaughterhouse has been enough to convert many to vegetarianism. But even if we have no qualms about the slaughter of animals for food, there are serious environmental and other ethical issues involved.

The grazing of cattle, sheep, and goats for meat can have a valid place in an ecologically balanced food economy. For one thing, not all land is fit for the cultivation of food crops such as grains and beans; the soil may be poor and there may be inadequate water. In such cases animals change in edible forage plants into human food. Attempts to develop agriculture on such lands can prove disastrous. In recent years, the cultivation of wheat on range lands in Colorado, for example, has led to the destruction of the topsoil.

However, the number of animals raised exclusively on pastoral lands in America is small. Most spend a good part of their lives in feed lots. There are enclosed areas where thousands of animals are crowded together and fattened with a diet of corn, soybeans, and other potential human foods. Lappé's original point that we use human food to feed livestock and thus deprive hungry people is still a valid one. And we are doing this in what amounts to animal concentration camps. Life in these cattle feed lots is so unhealthy that the animals are constantly dosed with antibiotics. Half of the antibiotics produced in this country are used in livestock feeds.

The animals, of course, produce manure—literally mountains of it. Whereas if properly treated, it might be used as fertilizer or even as a source of methane fuel, usually it is treated as a waste product. It is allowed to wash away into streams, rivers, and lakes where its high concentrations of nitrates and phosphates upset the ecology of these waters. The Chesapeake Bay, for example, long a major source of fish and shellfish, has become almost barren. Animal waste runoff from farms along its source rivers has virtually destroyed the balance of plant and animal life.

If we buy beef, especially the cheaper varieties used in fast-food outlets, there is another fact to consider. A substantial amount of this beef comes from Central American countries where the cattle industry has been involved in the wholesale destruction of the tropical rain forests. Huge tracts of forest are cleared by bulldozers and are sown with grazing grasses. Cattle are pastured there and the meat sold at low prices to American concerns. In a few years the fragile topsoil is depleted and the area abandoned. The band of massive rain forests that gird the earth's equator is a key factor in the ecology and climate of the planet. It is being devastated in the noble cause of the cheap hamburger.

Dairy Foods

Like many total or semi-vegetarians, Sarah believes that she is doing cows and other livestock a good turn by not eating their meat, and by substituting cheese, yogurt, and milk in their diet. And to be sure, she is refusing to underwrite the slaughter and the raising for slaughter of these animals. But to the compassionate observer, many dairy farms have little to recommend them over the feed lot and the slaughterhouse.

In a former, more innocent age, milk cows led a quiet, bucolic life. Ole Bessie roamed hillside pastures and twice a day was hand-milked in the barn by her owner. She performed a useful service, changing weeds and forage into human food and providing fertilizer.

Today, this Sound of Music idyll is largely a thing of the past. Very likely Ole Bessie is chained for most of her life in a huge barn with several hundred other cows. She can do little more than eat, lactate, and defecate. Her incarceration makes her prone to infection, so she receives antibiotics as well. At milking time vacuum hoses are attached to her teats and her udders are pumped dry. Like her brothers and sisters in the food lot, Bessie is treated as

little more than a biological machine. As soon as her milk production falls below a certain level, she is sent to the slaughterhouse.

Clearly, the use of dairy foods also raises serious issues for the humane and environmentally aware consumer. Bessie may not be the smartest of God's creatures, but she probably knows the difference between life in a stall and in a pasture. With our glass of milk, bit of cheese, even our wholesome bowl of yogurt, we are contributing to her life of incarceration. And we are contributing as well to the relatively inefficient use of human foodstuffs.

Eggs

There is something nostalgic and appealing about a flock of hens, clucking about the yard, thrusting with the rooster behind the willow tree, and laying an occasional egg to nourish their human caretakers. But again this pleasant image is a thing of the past. Most chickens (both egg-layers and those destined for the frying pan) are raised in conditions that make a feed lot or dairy barn look like four-star luxury accommodations.

The typical chicken spends her life in a windowless "factory," in a cage one foot high, wide, and long. She barely has room to stand up, let alone move around. On that same spot she eats, defecates, and lays her eggs. She is fed hormones and doused with antibiotics. The factory lighting is manipulated so the "day" passes quickly and the chicken lays more frequently. The bird is lucky to survive a single year under such conditions.

"Luxury" Foods

A substantial part of the American diet consists of "luxury" items. These include sugar, coffee, cocoa, tea, and tropical fruits such as bananas. These have become such an accepted part of our daily life that we scarcely consider them "luxuries." These foods are not necessary to human life and until relatively recently were unknown or little used in most of Europe and America. They are also luxuries in that their production exacts a toll on both the land and the people involved in their production.

From their first contacts with the lands of Asia, Africa, and South and Central America, the European nations recognized a great agricultural resource. Especially in the nineteenth century, the colonial powers, including the United States, developed this resource to meet their own needs by turning these areas into suppliers of cheap agricultural products. These items included rubber, cotton, and hemp as well as food items such as coffee, sugar, and bananas.

In some regions, plantations were immediately established to raise these products on a massive scale. In others, taxation forced small farmers to cultivate export cash crops, and eventually, in hard times, to sell off their land. In most areas the net result was the same. The agricultural land was concentrated in the hands of a few native or foreign concerns, and most of it was dedicated to the monoculture of the export cash crops. Land used for domestic crops decreased. Many peasants, deprived of even a garden plot, became dependent for survival on imported foods, which could be acquired only with cash earned on the plantations. Native people became indentured through the powerful agricultural interests, and bound to a life of poverty and hunger.

Although the colonial era has passed, and most of these countries are independent, little has changed. In the "banana republics" of Central America, in the coffee-growing nations of sub-Saharan Africa, in the sugar-producing areas of the Philippines, the agricultural, social, and economic situation is essentially the same. Most of the land is used for cash crops and is controlled by a native elite or by multinational corporations. In El Salvador, for example, 81 percent of the arable land is devoted to coffee cultivation and is owned by 3 percent of the population. The main beneficiaries of this economy are the urban middle and upper classes. They enjoy a North American lifestyle replete with cars, TVs, and refrigerators, while the people who work the land live at or below subsistence level.

In some areas the issue is not merely one of social and economic justice, but of survival. According to *Food First*, a book on world hunger by Lappé and Joseph Collins, cash crop agriculture has been an important factor in the current famine in sub-Saharan Africa. Traditional food crop farming protected the soil and produced a surplus that fed the people during drought periods. Throughout this century, European concerns practicing large scale cultivation of cash crops such as peanuts and cotton reduced the amount of land in local food production. They cut down the few precious trees of the savannah to permit mechanized farming. They "mixed" the soil, and when the land was no longer fertile they abandoned it. Once-productive land became desert, useless for growing food and contributing perhaps to the long drought.

The problems of social and economic injustice, of poverty, hunger, and famine in the Third World are, of course, complex ones. But, at the least, we should be aware that our choices in the supermarket are related to them. The banana we eat with our morning cereal and the cup of coffee we enjoy at noon connect us to these realities.

Grains, Beans, Vegetables, and Fruit

Most of the agricultural products that Americans consume are domestic products. The issues raised by our use of them, while close to home, are also serious and complex.

Most of the food grown in the United States is produced by standard commercial agricultural techniques. This system involves the use of chemical fertilizers and petroleum-based pesticides and herbicides. Thus, American commercial agriculture is often a major polluter of the environment. Fertilizer runoff is a major cause of water pollution. Broadcast spraying puts agricultural poisons into the air and water as well as the soil.

In addition, this is not a sustainable agriculture. It is steadily destroying the topsoil and the living organisms within it. Some observers say that by the turn of the century much of the farmland now in use will be infertile. We may be approaching another "Dust Bowl" era, with disastrous consequences for ourselves and for the rest of the world.

Almost every time we buy a loaf of bread, a can of beans, or a head of lettuce, we are supporting this system of agriculture. And Sarah, though she may oppose industrial polluters on the one hand, is abetting agricultural polluters on the other through her food purchases. While she is concerned about food scarcity in other parts of the world, she may be contributing to an eventual shortage closer to home.

We have by now painted a depressing picture. When we buy meat or dairy we are supporting exploitation of animals, environmental pollution, and the use of human foods as "feed." When we stop at Burger King for a quick meal we are helping to swing the axe on the tropical rain forests. When we eat a banana or sip a cup of coffee, we may be underwriting an unjust social and economic system and helping to keep people in want and hunger. Even when we buy a loaf of whole wheat bread we are supporting a system of "dead-end" agriculture. What indeed can a humane, concerned, and aware person buy and eat? One is tempted to despair. The hypersensitive spirit resolves to become a "breatharian." The rebellious one throws up his or her hands impatiently and marches down to the local burger joint. "Apres moi le deluge!"

Diet for a Just Planet

How then is it possible to make our food choices congruent with the way we would like the world to be? Is it necessary to become a homesteader or food gatherer in some remote area? Not really, but it does require some energy, vigilance, and integrity. Let's look at each of the groups of foods we considered and at some practical things we can do regarding each of them.

It is possible to live without meat, dairy foods, poultry, and eggs. Vegans (people who eat foods only from plant sources) of past and present have proven this. Certainly, most people could manage with smaller amounts of these items, which are increasingly associated with various health problems, from obesity to heart disease. If we do wish to use them, it is important that we find producers who are ecologically aware as well as humane. There are livestock farmers who range-feed their animals and who use the manure for fertilizer, dairy farmers who allow their cows fresh air and sunshine and do not saturate them with hormones and antibiotics, and chicken farmers whose animals live normal lives out-of-doors.

Products from such sources are available but often are difficult to find. Your local natural foods store may carry some. If so, they will be clearly marked. A "righteous" carton of eggs, for example, will read: "These eggs are from grain-fed, free-ranging, nonmedicated chickens." If no such items are stocked, tell the store owner that you are interested in them.

Coffee, sugar, cocoa, and other Third World export crops are not necessary to life. Many societies do quite well without them. If we so choose to use them, again we should explore alternative sources. Since the sources lie on the other side of the world, this is not easy. Happily, some groups have become active in this enterprise.

One such pioneer is a tiny concern in Fort Wayne, Indiana, called "Friends of the Third World".... It sells, by mail order, only products from countries in which the local workers control the land and get a fair share of the profits, including coffee and sesame tahini from Nicaragua, coffee and tea from Tanzania, vanilla beans from Madagascar, and cashews and tea from Mozambique.

The vast bulk of grains, beans, nuts, seeds, vegetables, and fruits are produced by regular commercial agriculture. However, there is a small but growing community of ecological farmers around the country who use organic rather than chemical fertilizers and employ natural methods of pest and weed control rather than poisons. Thus, they nurture rather than pollute their land and the larger environment. Theirs is a sustainable agriculture which will keep the soil alive and productive. Most of these farmers operate on a small scale and are struggling to survive. They need and deserve the support of the environmentally aware consumer.

While the number of large family farms is decreasing, especially in the Midwest, the number of small family farms around the country is increasing. Some are ecologically oriented, some are not. In either case, we should support a local producer when we have the opportunity. Energy (oil), truck exhaust, and noise are each involved in the transport of foods from one end of the country to another. If we are concerned about oil exploration in environmentally delicate areas, we should also be concerned about the fact that most of the vegetables and fruits on our dinner table have been trucked in from California.

Grow Thyself

A second option is to grow our own food. Few people are inclined to become self-sufficient homesteaders, but many have the ability to produce at least part of their own food. These products will be organic, environmentally benign, and untainted by social injustice.

Most of us are content to grow a few vegetables in our garden or community plot. According to one California-based group, however, it is possible to produce a sizable portion of our entire needs on a relatively small plot. This idea was advanced by John Jeavons in his book on biointensive techniques, called *How to Grow More Vegetables Than You Ever Can Imagine*, and has been expanded by Jeavon's associate, David Duhon, in *One Circle*.... Duhon maintains that it is possible to produce a nutritionally complete food supply for one person on a circular plot ("one circle") of about 1,000 square feet. He allows that the exact

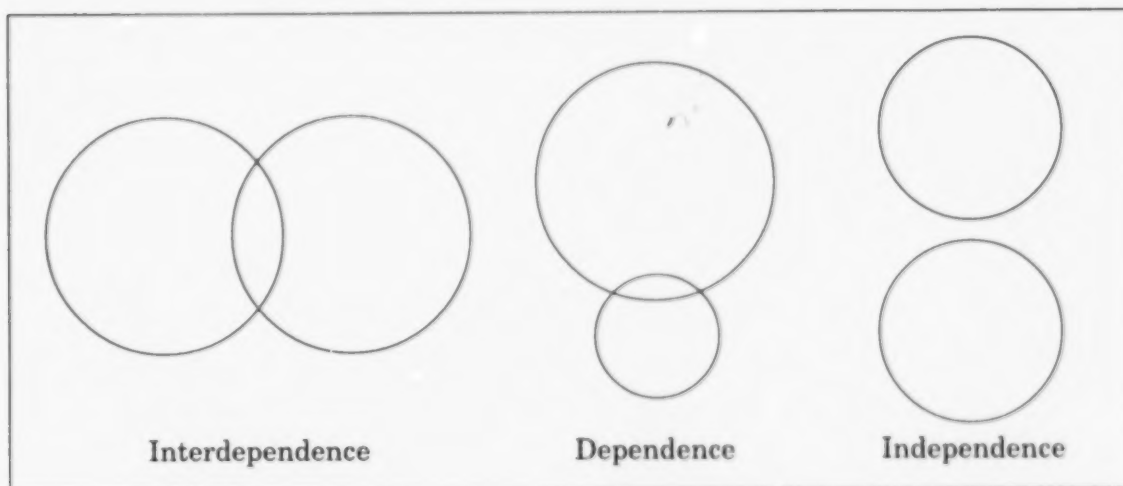
crops and techniques have yet to be perfected; he proposes, though, as a starting point, a list of 14 basic food crops, including wheat, sweet potatoes, soybeans, sunflowers, parsley, collards, and garlic. Whether Duhon's proposal is viable or not (for one thing, he posits an eight-month growing season), his basic message is clear: we can raise much more of our own food than we usually do.

These measures may also seem futile. What difference will it make if I, one individual, insist on organic sunflower seeds or investigate the pedigree of my apples? It may not make a difference. But then again, it might. The fact is, the destiny of the planet is determined by the daily, seemingly petty decisions of the millions of individuals who comprise humanity and who consume its resources daily. In either case, as Kant observed, the moral person acts always as he or she would want all of humanity to act. This is a high ideal, but there is no better place to start to realize it than in our choice of daily foods.



Interdependence, Dependence, and Independence

Part 1: Diagramming the Relationships



Part 2: Interdependency Case Examples

Example 1: A family purchases food at a local market. The grocer is able to earn a living in the community and contributes to the local Hispanic Chamber of Commerce which sponsors "Fiesta Mexicana," a popular neighborhood festival.

Example 2: William and his mother have a spot in the corner garden sponsored by "Shoots and Roots." They take care of their space and help with general upkeep. Through this program William met several older neighborhood residents. One older woman gives him lemonade and cookies each Saturday after they finish their gardening. She also tells his mother how generous he is for helping her and compliments him on the care he gives the garden and his contributions to his family's meals.

Example 3: Sharon usually stops at her favorite fast-food restaurant before a basketball game to get something to eat. Today she is going to a different fast-food restaurant though, because she was given a coupon to use there as part of an incentive program at her school for all students with perfect attendance.

The Pizza/Shoe Analogy

In this activity, students are asked to compare two distinct, seemingly unrelated objects. Although most students have fun while engaging in this purposeful activity, expect some confusion and disagreement, and remember that discussion and exploration are part of the process. For more information about this teaching strategy, see a description of Thomas Gordon's ideas about creativity in *Models of Teaching* by Joyce, Weil, and Showers (1992). Another discussion of Gordon's ideas can be found in the chapter "Synetics" in John Miller's *Humanizing the Classroom* (1980).

Analogy: How is a pizza like a shoe? Have a shoe and a frozen pizza on display as the students enter the room. Begin by listing descriptive words and phrases about the shoe generated by students. Ask the following questions. Teachers may want to group the questions as suggested below.

- What is this shoe made of? Where do these materials come from?
- Who uses shoes? What is the purpose of the shoe? What do you associate with shoes?
- How was it produced? What environmental resources were used?
- What kinds of shoes exist? Why? How do we know what size to buy?
- How much do shoes cost? Who receives this money?

List student responses on the chalkboard. Ask them to clarify their responses if needed. Do not expect students to have answers to all of the questions; in fact, not having answers is part of the activity. Then ask students to consider how a frozen pizza is like a shoe. How is a pizza like a shoe? How are they similar? How are they different? Have students summarize what they have learned from the comparison by writing two statements about food.

The following are possible characteristics of shoes: they contain natural and synthetic material, and are made in many countries, are made from imported products, meet a need, come in many varieties, provide comfort, represent status, are used by many people, involve many processes to produce. Many of these characteristics are also characteristics of frozen pizza. Remind students of this after they have completed their comparison.

Students might come up with statements similar to the following: Foods contain natural and synthetic ingredients. Some foods are simple, while others are a result of many complex processes. We may not know what is in a food, where it came from, or the conditions under which it was produced.

Using the pizza/shoe analogy and their statements about food, students are to conclude this activity by clarifying the meaning of interdependency. For example, people depend on food growers, producers, and handlers to make food available; to use healthy practices; to set fair prices; and to provide reliable information about contents, use, and care of products. The food industry depends on consumers to buy products, to pay a fair price, and to care for and use food properly. Food workers depend on their employers to pay fair wages and to provide safe working conditions. (The same set of interdependent relationships is true for shoes. Remind students of this if they are having trouble understanding interdependent relationships in regard to food.)

After this activity, ask, What does "interdependent relationships" mean to you? What other situation in your everyday life do you think best represents the idea of interdependent relationships?

Concept Analysis of Yes/No Statements

Directions: Read through these statements. Think about how the *yes* statements are similar. Think about what makes the *no* statements different from the *yes* statements. Then label the last four statements as *yes* or *no* depending on which group you think the unlabeled statements belong to.

1. The grass is green. (yes)
2. The sky is beautiful. (no)
3. The table top is 24 inches from the floor. (yes)
4. Fast food contains a lot of fat and cholesterol. (yes)
5. Eating fast food is bad for one's health. (no)
6. Two brown houses are in the 200 block of South Street. (yes)
7. Only brown houses should be built. (no)
8. Oranges contain vitamin C.
9. Rock music is great.
10. People should not dye their hair orange.
11. Eighty percent of high school students wear jeans to school.

Yes characteristics

(How are all the yes statements the same?)

No characteristics

(How are the no statements different from the yes statements?)

Write two new *yes* statements.

Write two new *no* statements.

Recognizing Claims in Everyday Life Worksheet

Directions: Your task is to be aware of the kinds of claims people make in everyday life, some of which are facts and values. Write down two factual claims and two value claims you hear, see, or read before class time tomorrow. Also, explain why you think the statement is a factual or a value claim.

Factual Claims

Where did you learn this factual claim?

1.

2.

Why do you think these are examples of factual claims?

Value Claims

Where did you learn this value claim?

1.

2.

Why do you think these are examples of value claims?

Write one sentence that summarizes what you have learned about factual and value claims.



Gift Box Lab

During the last year, a local community cooperatively organized a food drive to collect and organize family gift boxes to give to a food pantry. Each box included the following:

flour	coffee or tea
sugar	hot chocolate
powdered milk	crackers
nuts	powdered soup mix
dried fruit	lentils or navy beans
a box of macaroni and cheese	oatmeal
rice	boxed potatoes

During the food lab you are to put yourself in the place of a family receiving this gift box. You should select and prepare a family meal using the food in this box. Following the preparation and serving of the meal, you are to answer the questions on the gift box think sheet.

Identifying Factual and Value Claims

You have been learning the difference between factual and value claims. Remember the truth or falsity of factual claims can be determined by tests of experience through some observation. However, factual claims are not necessarily true for all time.

Value claims are statements that rate something according to its worth. They have value meanings connected to them that may vary from person to person. These meanings have both cognitive and emotional components. We appraise value claims by soliciting reasons to support the claims and examining the adequacy, relevancy, and coherence of the argument given.

State two factual claims and two value claims about the meal you prepared.

Please respond to these questions:

- How would you feel if you received a gift box like this? (role exchange and universal consequences test)

- What significance is attached to giving and receiving gifts in U.S. culture?

- What value judgment might be implied by the gift or specific articles contained in the gift box?

- What alternative values might these particular foods represent?

- How would you feel if you had only these foods to eat?

- What are some things that might happen if these were the only foods available to you?

- What might happen if sending gift boxes was the only method used to alleviate hunger?

Controversial Food Lab

Directions to teacher: Read this reference before introducing the food lab. The strategy for conducting the controversial food lab outlined below is used to teach the intellectual and social skill of perspective-taking, a skill needed in assessing statements and supporting or refuting judgments.

- Assist students in selecting a controversial food to investigate, such as meat, cheese, tofu, artificial sweeteners, or vegetables.
- Help students locate recipes that contain the product selected.
- Have students form student lab groups and prepare foods, sample the food dishes containing the same ingredient, and write a reflection paragraph summarizing what they learned.
- Ask students to collect and compile statements about controversial food from various media.
- Assist students in developing the concept of points of view in support material ■ D.20.
- Ask students to work in small groups to identify factual and value claims on their list of statements about the controversial food.
- Ask students to identify the points of view represented on the list of statements. What individual or group is making them claim? Which perspective is being represented?
- Facilitate class discussion of the importance of identifying and examining multiple perspective and the role that points of view and perspective taking have in making reasoned judgments.
- Revisit the importance of remaining alert to potential bias in the factual and value claims that appear on their list of statements. For example, some individuals or groups try to persuade people to believe or do what they want by presenting only one side of the controversy. These claims may or may not be credible, that is, they may or may not have adequate support.

Variation: Sometimes specific questions arise in class that warrant special attention, or a particular food belief or practice hits the headlines or other media. For example, popular teen magazines regularly contain articles on vegetarianism. In addition to the controversial food lab, students might present a panel discussion, debate, or skit based on further investigation of the question or issue. For example, what are the pros and cons of vegetarian diets from different points of view. Some student references are listed below.

In this example, students might start by preparing simple vegetarian dishes. Before planning a presentation, ask students to clarify the meaning of various terms and types of vegetarian diets. For example, the term vegetarian is often used loosely to describe a variety of diverse plant diets that may or may not include fish/poultry, dairy products, and other nonanimal foods that are processed or prepared in unacceptable ways. Vegan refers to a lifestyle that includes a pure plant food diet.

Use the same sequence of directed activities outlined above to assist students in learning about perspective taking. Monitor small group work to help students identify factual and value claims and points of view. Look for evidence that students understand concepts introduced earlier in the module or course, such as factual and value claims, points of view, and reasoned judgment. Refer back the definitions in ■ D.11, student reference A, as needed.

The sample statements about cheese that follow illustrate how students might organize their statements about the controversial food under consideration.

Factual Claims

1. Cheese contains fat.
2. Cheese contains protein.
3. Cheese is a source of calcium.
4. Buying cheese supports the farm economy.
5. Cheese is highly processed.
6. Other?

Source of Information

Vegetarian
Dairy journalist
Dentist
Dairy farmers
Vegan

Value Claim

1. Broccoli is a better source of calcium than cheese is.
2. Cheese tastes good.
3. The amount of high fat cheese in school lunches isn't healthy.
4. Eating a lot of cheese is bad for people with allergies.
5. Cheese production promotes unnecessary waste products.
6. Other?

Source of Information

Dietitian
Foods editor
Consumer advocate

Vegetarian
Vegan

The statement, "cheese is considered high in calcium (or fat)" is a factual claim viewed from a health point of view. To say cheese is good or bad for you because of its calcium (or fat) content is a value claim from a health viewpoint.

To help students identify different perspectives, you might ask, What agricultural procedures and technological processes used in handling animals, storing and transporting animal products or processing cheese are cited as causes of concern by some health (or environmentally) motivated vegetarians?

In any discussion of controversial issues, it is important to provide balance in sources of information and perspectives reflected in the materials available for student investigation. Help students identify statements that are a matter of dispute. The classroom should provide a forum for inquiry and the open exchange of ideas.

Discuss how the source of information influences one's decision about what to believe and do. Help students see the importance of critically examining each perspective for potential bias. For example, ask students to view the video, "Diet for a New America," listed in the references below. Ask students to identify the consequences of a diet high in animal foods on our health and/or the environment. After the video, have students use an impact chart to record their ideas. Illustrate the process by completing an impact chart for the consequences on health in a large group, followed by small group work on the consequences on the environment. See the sample impact chart on the next page that was prepared by students after watching the video. Then ask students to consider the quality of the information presented in the video. Build on previous learning from module C, especially directed activities and related support materials on evaluating one's thinking and acting and alternative food consumption patterns.

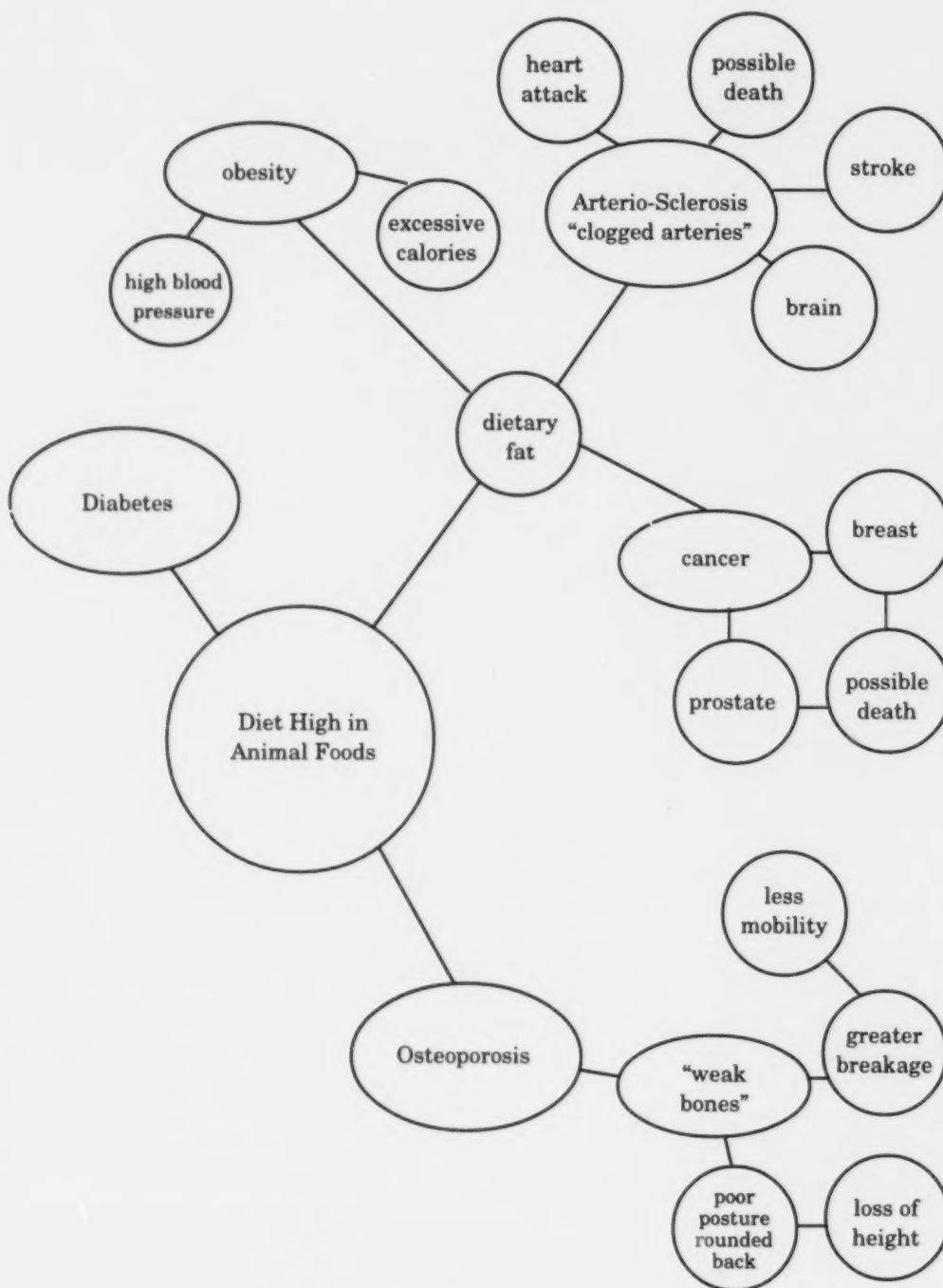
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- World Wide Web: other rich sources of information can be found under the subject vegetarianism on the World Wide Web, for example:
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- This site was reviewed by David Harquail<y17n@unb.ca> (December 7, 1994) as a source of information for high school students on the subject of being a vegetarian. It was identified as a good source of information for students in family consumer sciences education and chemistry who are interested in nutrition or who want to conduct food-related projects.
- Veggies Unite! a searchable index of over 900 vegetarian recipes, including storage tips, vitamins, and many links to nutrition and health. URL: <http://www-sc.ucssc.indiana.edu/cgi-bin/recipes>

Points of View

The most common points of view regarding ways of thinking, feeling, and acting toward food are aesthetic, environmental, hygienic, intellectual, ethical, prudential, and ideological. Use the definitions below to label the statements in support material ■ D.19.

- The *aesthetic* point of view is concerned with the appearance of food.
- The *economic* point of view is concerned with cost and efficiency of obtaining, storing, and using food.
- The *environmental* point of view is concerned with the short- and long-term consequences of food choices and action to the environment.
- The *hygienic* (health and safety) point of view is concerned with whether food is wholesome and safe to eat.
- The *intellectual* point of view is concerned with truth, reliability, and validity of the information about food.
- The *ethical* point of view is concerned with what is fair, just, and right in relation to other people. It involves consideration of others' interests, how people are being treated, and the consequences food choices and action have on other people.
- The *prudential* point of view is concern for one's own interests, such as what is healthy or best for oneself economically. It refers to wise personal choices.
- The *ideological* point of view is concerned with what is believed to be correct according to a specific doctrine (for example, religious or political).

These points of view often overlap. The ethical point of view, where relevant, has priority over other points of view because it takes into consideration reciprocity, fairness, equity and justice for all people. However, other points of view are often reflected in statements about food. As such, they are relevant in justifying judgments about what to do in food choices and action.

Mock Trial

Directions: The mock trial focuses on the valued end, "Everyone ought to be concerned about the interdependent relationships involved in getting food." The purpose of the trial is to convince the jury that the valued end is not guilty. Ideas are often on trial. A trial is one way of demonstrating how one might look at ideas critically.

Role Descriptions for Mock Trial

Judge: The judge is concerned with conducting the trial in an orderly manner. The judge must make sure both sides have a fair opportunity to present their cases. It is not the job of the judge to decide on the guilt (unreasonableness, lack of worth) or innocence (reasonableness, goodness, or worth) of the valued end. He or she is to avoid showing favoritism to either side. The judge announces the charge, rules on objections raised by the prosecution and defense teams, and gives the jury final instructions. An objection is appropriate if the attorney's questions imply an answer or lead to an answer; for example, "Isn't it true that buying imported grapes exploits workers?" In cases of a jury tie, the judge may cast the deciding vote or declare a mistrial. If the verdict is "guilty as charged," the judge must impose a suitable sentence.

Jury: The jury consists of 12 or more fair-minded individuals who listen to the arguments and make a decision of either *guilty* or *not guilty*. Jury members should begin the case with the assumption that the accused valued end is innocent or reasonable and good until proven guilty (unreasonable, not worthy, or improper). A spokesperson is appointed to count votes and announce the verdict. The decision may be rendered by a secret ballot of the jury with a simple majority deciding the verdict.

If time permits, the jury can retire from the courtroom after the case and discuss its verdict. If this method is used, the verdict must represent a unanimous decision. When coming to a consensus, consider the following:

- Every point of view must be seriously examined.
- Personal biases must be set aside.
- Principles of justice (the moral point of view) take precedence.

Prosecution Team: The team of prosecuting attorneys must try to convince the jury that the charge of unreasonableness and lack of worth brought against the valued end is true. The team studies the charge very carefully and conducts a good deal of pretrial research. They find and interview helpful witnesses and give opening and closing statements to the jury. The team prepares an argument opposing the valued end and cross-examines witnesses presented by the defense team.

Defense Team: The team of defense attorneys argue in support of the valued end and argue against the charges of unreasonableness and lack of worth. They must show that the evidence presented by the prosecution does not lead to a verdict of guilty. The defense team also needs to do pretrial research, find witnesses, plan a winning strategy, and cross-examine the witnesses presented by the prosecution. The defense team presents opening and closing statements to the jury. The defense team also anticipates reasons the prosecution will give for the charge and find ways to counter those charges.

Witnesses: Witnesses are either experts in the subject matter or can relate some personal experience. In this exercise witnesses play the role of real-life experts by studying a book or magazine article. All testimony by witnesses must be true and based on real experience or real research. Witnesses meet with either the defense or prosecution team before the trial to plan questions and answers.

Special Instructions for the Prosecution

You are to convince the jury that the valued end is unreasonable and lacks worth. As prosecuting attorneys you are to study the charge very carefully and find supporting facts and values. Remember to find evidence from many points of view, particularly the moral point of view if it appears relevant. Before the trial begins you will need to do research in books and magazines. It is your job to make the charge against the valued end more specific and real in the minds of the jury. You need to consider the following points:

- lack of validity for everyone
- inaccuracy and irrelevance of facts
- lack of sound reasoning
- missing reasons
- inadequate definition of *interdependent relations*
- inadequate reasons given to say this is a reasonable value

You are to find four to seven witnesses who will help your case. You are to present these witnesses during the trial and ask them questions that they can answer in a way that will help show the unreasonableness of the valued end. After you are finished with each witness, the defense attorneys can cross-examine them in an attempt to point out errors in the testimony or cast doubt upon its value or relevance to the case. You are also permitted (but not required) to cross-examine each defense witness.

A useful prosecution witness shows that the valued end is unreasonable. In doing research, either the witness or a member of the prosecution team may find an article about buying imported grapes. The defense will argue that buying imported grapes contributes to the exploitation of agricultural workers. Thus, the responsible consumer will remember the valued end "Everyone ought to be concerned about the interdependent relationships involved in getting food" and forego grapes. The witness for the prosecution should study the article and play the role of the harvest supervisor, for instance, saying, "At least harvesting grapes is a job that will give me money for my family." The better the witness studies and understands the article, the more believable he or she will be.

During the course of the trial the prosecution team will

- present an opening statement to the jury that runs no longer than three minutes. The statement summarizes the important facts of the case and explains what the prosecution will attempt to prove. The defense team cannot object to any part of this statement.
- present its case for the unreasonableness and guilt of the valued end. Prosecution presents its case first. A member of the team interviews each prosecution witness to bring out facts that will help prove the guilt of the valued end.
- cross-examine each witness of the defense to disprove the testimony or to cast doubt upon its value in the eyes of the jury.

After the prosecution has cross-examined final witnesses for the defense, the prosecution presents the closing arguments to the jury. The prosecution team presents its argument after the defense. The closing argument of the prosecution summarizes the facts that support its position and tries to show how the defense team has failed to prove their position. Closing remarks cannot run longer than five minutes.

Special Instructions for the Defense

You are to convince the jury that the valued end is not guilty, or is reasonable and worthy. You need to consider defending the following points:

- validity for everyone
- accuracy and relevance of facts
- soundness of reasoning
- missing reasons
- adequate definition of interdependent relations
- adequate reasons supporting this valued end

As defense attorneys you are to study the charge very carefully and find facts and values that show the charge to be false or beyond proof. Before the trial begins, you will need to do research in books and magazines. The more research and planning you do, the more likely you will be able to develop a winning strategy on the trial date.

You are to find four to seven witnesses who will help your case. You are to present these witnesses during the trial and ask them questions that they can answer in a way that will help the case; the prosecuting attorneys can cross-examine them in an attempt to point out errors in the testimony or cast doubt upon it. You are permitted (but not required) to cross-examine each witness for the prosecution.

Witnesses are chosen from those available in the class and each must conduct the research needed to become an expert able to give testimony. One or two witnesses may present personal experiences instead of expert testimony. Witnesses should meet with the defense team before the trial and must tell the truth during their testimony.

In doing research, either a member of the defense team or the witness finds an article about the interdependent relationships. The prosecution will try to prove that consumers do not need to worry about buying imported grapes. The prosecution will say that even if migrant workers are exploited, they are still earning money. A witness for the defense should play the role of the migrant worker and testify that he or she has a job, but is not able to feed the family. The better the witness studies and understands the article, the more believable he or she will be.

During the course of the trial, the defense team will

- present an opening statement to the jury, no longer than three minutes. The statement summarizes the important facts to be presented and explains what the defense will attempt to prove. The prosecution team cannot object to any part of this statement.
- present a case for the reasonableness and innocence of the valued end. The defense presents its case after the prosecution. A member of the team interviews each defense witness to bring out facts that will help support the innocence of the valued end.
- cross-examine each witness of the prosecution in an attempt to disprove the testimony or to cast doubt upon its value.

After the prosecution has cross-examined the final witness, the defense presents its closing arguments to the jury. The defense team presents its argument first, keeping within the five-minute time limit. The closing argument of the defense summarizes the facts that support the reasonableness of the valued end and tries to show how the prosecution failed to prove its point.

Jurors' Verdict

Directions to jurors: Complete the verdict and give an explanation of your decision.

I, _____, pronounce the valued end "Everyone ought to be concerned about the interdependent relationships involved in getting food" to be *(Check one)*

☐ guilty (unreasonable) or

☐ not guilty (reasonable).

The explanation for my verdict follows: (Include the supporting facts and values that convinced you to vote the way you did.)

Living on Less than \$100 a Year

Excerpted from "Living on Less than \$100 a Year" from *The Great Ascent* by Robert L. Heilbroner. Copyright ©1963 by Robert L. Heilbroner. Reprinted by permission of HarperCollins Publishers Inc.

Objective:

- To visualize conditions of poverty experienced by people in the developing world.
- To identify personal feelings and values related to poverty.

Procedure:

1. Ask students to sit in a circle or any other arrangement that allows dialogue.
2. Ask students to close their eyes and imagine their own home in detail, walk through each room, and then listen to the essay with eyes shut, doing what it suggests. To get started, ask, "Have you ever thought about what your house would look like with no furniture or appliances in it? How does an empty house make you feel?"
3. Read "Living on Less Than \$100 a Year" aloud to the class.
4. Ask the following questions:
 - What barriers will this family encounter in trying to get food that is safe to eat?
 - How does encountering these barriers change their valued end?
 - How would a year of good food production due to perfect weather affect the family's desired valued ends?
 - How does the availability and use of resources influence access to a safe food supply?

Living on Less than \$100 a Year

To begin to understand economic development, we must have a picture of the problem with which it contends. We must conjure up in our mind's eye what underdevelopment means for the human beings for whom it is not a statistic but a living experience of daily life...

It is not easy to make this mental jump. But let us attempt it by imagining how an American family like yours could be transformed into an equally typical family of the underdeveloped world.

We begin by invading the house of our imaginary American family to strip it of its furniture. Everything goes: beds, chairs, tables, television set, lamps. We will leave the family with a few old blankets, a kitchen table, a wooden chair. Along with the bureaus go the clothes. Each member of the family may keep in their "wardrobe" their oldest suit or dress, a shirt or blouse. We will permit a pair of shoes to the father, but none for the wife or children.

We move into the kitchen. The appliances have already been taken out, so we turn to the cupboards and larder. The box of matches may stay, a small bag of flour, some sugar and salt. A few moldy potatoes, already in the garbage can, must be hastily rescued, for they will provide much of tonight's meal. We will leave a handful of onions, and a dish of dried beans. All the rest we take away: the meat, the fresh vegetables, the canned goods, the crackers, the candy.

Now we have stripped the house: the bathroom has been dismantled, the running water shut off, the electric wires taken out. Next we take away the house. The family can move to the toolshed. It is crowded...

We have only begun. All the other houses in the neighborhood have also been removed; our suburb has become a shantytown. Still, our family is fortunate to have a shelter...

And still we have not reduced our American family to the level at which life is lived in the greatest part of the globe. Communication must go next. No more newspapers, magazines, books—not that they are missed, since we must take away our family's literacy as well. Instead, in our shantytown we will allow one radio...

Now government services must go. No more mail, no more fire department. There is a school, but it is three miles away and consists of two classrooms. They are not too crowded since only half of the children in the neighborhood go to school. There are, of course, no hospitals or doctors nearby. The nearest clinic is ten miles away and is tended by a midwife. It can be reached by bicycle, provided that the family has a bicycle, which is unlikely. Or one can go by bus—not always inside, but there is usually room on top.

Finally, money. We will allow our family a cash hoard of five dollars... Meanwhile the head of our family must earn his keep. As a peasant cultivator with three acres to tend, he may raise the equivalent of \$100 to \$300 worth of crops a year. If he is a tenant farmer, which is more than likely, a third or so of his crop will go to his landlord, and probably another 10 percent to the local moneylender. But there will be enough to eat. Or almost enough. The human body requires an input of at least 2,000 calories to replenish the energy consumed by its living cells. If our displaced American fares no better than some peasants, he will average a replenishment of no more than 1,700 to 1,900 calories. His body, like any insufficiently fueled machine, will run down. That is one reason why life expectancy at birth in some countries averages less than forty years.

But the children may help. If they are fortunate, they may find work and thus earn some cash to supplement the family's income. And if they cannot find work? Well, they can search for undigested oats in the droppings of horses as some of the world's children do in times of hunger.

And so we have brought our typical American family down to the very bottom of the human scale. It is, however, a bottom in which we can find, give or take a hundred million souls, at least a billion. Of the remaining billion, most are slightly better off, but not much so; a few are comfortable, a handful rich.

Of course, this is only an impression of life in the underdeveloped lands. It is not life itself. There is still lacking the things that underdevelopment gives as well as those it takes away: the urinous smell of poverty, the display of disease, the flies, the open sewers. And there is lacking, too, a softening sense of familiarity. Even in a charnel house life has its passions and pleasures. A tableau, shocking to American eyes, is less shocking to eyes that have never known any other. But it gives one a general idea. It begins to add pictures of reality to the statistics by which underdevelopment is ordinarily measured.

Contextual Factors Affecting Access to a Safe Food Supply

Directions: As indicated in the story "Living on Less than \$100 a Year," availability and use of resources are not the only contextual factors affecting a family's access to a safe food supply. The following contextual factors also contribute:

- control by government and corporations
- food processing and handling
- the way consumers obtain, store, and use food

Give two examples of each of these contextual factors from your own life and explain how access to a safe food supply is affected. If you have difficulty finding examples from your life, the following supplemental materials might be helpful: brochures from government programs (Women, Infants, and Children; school lunch), newspaper and magazine articles regarding food processing and handling, videos regarding consumer storage and handling of food, and so on.

1. Control by government and corporations can prevent access to a safe food supply.
 - a.
 - b.
2. Food processing and handling also includes families' ability to pursue a safe food supply.
 - a.
 - b.
3. The way consumers obtain, store, and use food is another factor preventing access to a safe food supply.
 - a.
 - b.

Now, think about the affect those contextual factors might have on access to a safe food supply in a broader sense. For instance, how do these contextual factors contribute to world hunger? Using this question or one of your choice, describe an example for each of the contextual factors.

1. Control by government and corporations. Example:
2. Food processing and handling. Example:
3. The way consumers obtain, store, and use food. Example:

Data Chart for Alternative Means

Directions: List the alternative means for achieving a safe food supply presented by the film or guest speaker.

Goal: To achieve a safe food supply.

Alternative means	Contextual factors that affect alternatives open in the situation	People affected directly or indirectly	What is likely to happen in relation to goal/values?
1.			
2.			
3.			

Questions

1. What steps did you go through in completing the chart?
2. Considering the alternatives and the consequences on all parties directly or indirectly involved, what do you think is the best alternative for providing access to a safe food supply for the people in the video? Give reasons to support or define your judgment.
3. What went through your mind as you tried to explain and justify your judgment?

Talk Show: Section D

D.J.: We're back, folks. My guests and I are still puzzled over the whole food attitude question! We've talked about individual food attitudes, how we got the food attitudes we have, all the information about food and different kinds of food available, what and who to believe. Now we're down to the question... What are we supposed to eat??? I've got a caller on the line. Caller, are you there?

Felicity: Hi, I'm Felicity.

D.J.: Hi Felicity! You have something to share with us in regard to what we're supposed to eat?

Felicity: I just want to say that so far, what I've heard about food attitudes has been pretty self-centered. Each guest has been sharing what they think or have experienced personally. That's not all bad because everybody's different. But I'd just like to point out that it's not just me I should think about, or just our country. We are a world, and everything each one of us does in relation to food has some effect on the world as a whole. So many people don't think about that or understand it.

D.J.: So guests, what do you say to that?

Dee: She's right. It's so easy just to think about what goes on only in our own lives. I have to admit, I've seen some poor conditions while traveling. Many people work in poor conditions and do not have much food available.

Di: What do you mean Dee? Can you give an example?

Dee: Sure. In Chile, when I was there over Christmas vacation, we traveled through this small village where people were growing and harvesting grapes for export to other countries, including the United States. They'd fit our idea of a modern day peasant. My dad asked about the working conditions, how much they got paid. These people work for pennies compared to what agricultural workers make in our country! It's not enough money for them to live on at all, yet landowners who sell the grapes make plenty of money. We drove around the village with one of the owner's sons. That's how I found that out.

Di: Good example. But what does that have to do with Felicity's point?

Felicity: Don't you see? How many of you or your families buy grapes pretty much year around?

Hal: I do. I like to eat a lot of fruit because it's healthy.

Felicity: Where are your grapes coming from in the winter when they're not being grown in the United States?

Hal: I guess places like Dee just described. I don't know.

Felicity: Exactly! You don't know. You may be buying grapes imported from Chile, or other places like it (of which there are plenty). I might add, you're helping those owners make a lot of money while these other people live in poverty. And just because you want to be healthy. Where's your sense of justice?

Di: I think this Felicity's got a point, Hal. What do you say to that?

Hal: Uh... well...um...darn it... I don't know! I mean, I don't want to be supporting some system like that in Chile because it doesn't seem right. But I readily value my body and health so I can live life to the fullest. I have to eat healthy!

Chip: So eat something other than grapes!

Dee: That's too easy a solution, I'm afraid, Chip. Other fruits are grown around the world for us to import during the winter, too. Isn't the same thing going to be happening with them, too? And vegetables, too?

D.J.: Hey Felicity, what's this poor guy supposed to do? Eat healthy or not eat healthy so he's not supporting something he feels is wrong? You seem to have all the answers.

Felicity: I know what I'd do. I'd sacrifice foreign-grown produce for the good of everyone. I'm only one, and they are many. That's more important.

Di: Maybe to you it is. Look, aren't we talking about values? Maybe if we look at our values, they'll help us each understand what we're supposed to eat.

Hal: I've got one for you. Take me for example. I value a healthy mind and body. I also value equal rights for all people. I don't think anyone should have to live in poverty. So, I've got these two values that are conflicting and it seems that no matter what I do, one gets thrown by the wayside. Or here's another one: My mom and dad are really bothered by the pesticides put on fresh food, so they try to grow their own in a garden. A conflict they have is finding time to take care of the garden and growing enough to avoid buying from the store while still trying to hold down full-time jobs—my dad's a farmer and my mom's a teacher. Which brings me to a point that really bugs me. They feel all these chemicals are really dangerous to put in their bodies, and they get angry at companies that allow all that stuff to be done to food. Yet my dad uses pesticides and chemicals on his potatoes as a farmer. He says he has to make so much money a year to support the farm and the family, but he can't make enough money if he doesn't spray and fertilize the potatoes because the crop is so easily damaged by insects and the soil nutrients are depleted every year. He loses a lot of potatoes without adding that stuff.

Felicity: I think if your parents really want to look out for themselves and others, they should practice what they believe and not contradict themselves. Your dad should look into natural pest deterrents and crop rotation to rejuvenate the soil.

Hal: There are other things to consider, not just their belief in natural foods!

Dori: I'm sitting here listening, and basically what I'm realizing is 1) we each have conflicting values in ourselves, 2) we can't just think about our own little world, many things have to be considered, and 3) there is no easy solution to the question of what we're supposed to eat.

Di: So basically, what we've decided is that what we're supposed to eat depends on the values we each hold. Yet we have these value conflicts. I guess we've now brought up another question: What are we suppose to do? I mean, how do we decide what action to take?

D.J.: We'll be back in a flash!

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Module E is the culminating experience that will help students integrate conceptual knowledge and intellectual and social skills learned in previous modules. This module focuses on the question, What action should individuals, families, and society take regarding food-related concerns? To address this question, students use the practical reasoning process to develop and carry out a food-related family or community action project. The goal of this project is for students to become more thoughtful about the choices they make and to take reasoned action as family-member citizens.

The action projects should reflect the student's growing interest and involvement in socially responsible action as family member-citizens. Students may participate

- directly in helping people or creating responsive environments first hand,
- indirectly in channeling resources to address particular food-related concerns, or
- as advocates taking civic action to eliminate the causes of a particular food-related problem or to inform the community about specific issues that should be addressed.

Support material ■ E.1 provides background information on the learning principles on which the directed activities in module E are based, some ideas about possible projects, and alternative ways to approach student projects.

► **Teacher note:** The conceptual statements in module E are listed consecutively rather than parallel to directed activities in order to show their relationship to the entire sequence of directed activities.

▼ Making reasoned judgments enables individuals and families to take action regarding food.

Practical reasoning is a skilled intellectual and social process that individuals and families can use to make reasoned judgments about food, its meaning in their lives, and ways to obtain and store it.

— *Judgments about food are made in response to significant questions that arise in everyday life when there is a discrepancy between the existing state of affairs and the valued ends sought by the family. Families use discrepancy analysis to identify areas where improvement is needed.*

Making connections. Provide students with an overview of module E. Explain that they will be taking reasoned action to address a food-related concern of the family of their own choosing. The selection of a family action project is based on practical reasoning, a complex thinking process for determining what to believe and do that draws on understandings and intellectual and social skills learned in the four previous modules.

Introduce the first two directed activities—viewing a movie and the experience and skills checklists. These two activities are designed to help students connect different types of family action taken in everyday life with their own past experiences and learning in school. Explain to the students that they will start with a film depicting some kind of individual or family action in everyday life before discussing some of their own experiences and skills.

Viewing a movie. Have students view a movie to identify different types of individual or collective family action in everyday life. These different types can be categorized as communicative, reflective, and technical action, as described later in the conceptual statements. To

Conceptual Statements

- *Before the judgment is made, four categories of questions are posed and answered through cooperative dialogue.*
 - ... *Context questions refer to the personal, social, and historical aspects of a particular situation. Answers to context questions require interpretive skills.*
 - ... *Valued end questions refer to the goals set by individuals and families. Commitment to freedom, equality, and truth are the predominant guiding principles used in evaluating what would happen if different goals were pursued.*
 - ... *Means questions are used to determine courses of action and action strategies that people could take to accomplish valued ends.*
 - ... *Consequence questions identify and weigh the short- and long-term consequences of various courses of action on individuals, family, society, and the world.*
- *Knowledge gained from this cooperative dialogue is used in reasoning about what to do.*
- *Cooperative dialogue is the reasoned interaction individuals and families use in examining different points of view. Using this process, individuals and families share the goal of finding the best answer. This process requires a respect for people and an open atmosphere.*
- *The reasoned judgment that results from this process is assessed for rationality (adequacy, relevance, coherence). The most compelling argument regarding what ought to be done is selected.*

Different types of action are taken to address and answer significant food-related questions and concerns.

Directed Activities

prepare students for the film, ask them to watch for examples of reasoning and action portrayed in the movie. See support material ■ E.2 for movie selection criteria and questions for guiding discussion of the reasoning and action portrayed in the movie.

The answers to these questions can be organized under the headings in the diagram in support material ■ E.2. This graphic representation of the practical reasoning process for arriving at what to do is the same format used later in selecting an action project.

It is important at this point to start bringing together all parts of the process by showing how practical reasoning is used more or less systematically in everyday life. To warm up, refer to scenes from the movie that illustrate aspects of practical reasoning. Then lead students through the practical reasoning process by examining how the individuals or families in the movie used knowledge and skills related to the six components of practical reasoning—continuing concerns, context, valued ends, means, consequences, and judgment and action—in choosing what to do in the situation. Remind students that this kind of thinking was used earlier in the course when they developed arguments. Identification of continuing concerns was introduced in module A, interpreting information about the context of a food-related concern was introduced in modules B and C, identifying valued ends was initially introduced in module D, arriving at a means was introduced in module D, considering consequences of a course of action was introduced in modules C and D, and the reasoned judgment and action process is being introduced in module E.

Experience and skills checklists. Ask students to complete a series of experience and skills checklists to help them understand how their background, experiences, knowledge, and skills provide a framework for selecting a family action project in this module, and also for taking reasoned action in everyday life. Students should complete these self-assessment tools one at a time. The checklists are designed to help students monitor their experiences, gain some sense of current knowledge and skill levels, and use self-reflection to assess their progress in learning. Help the students see the potential value of becoming more reflective and setting new learning goals based on their assessments. For more detail on helping students with these skills, see material on metacognitive skills in Barry Beyer's *Practical Strategies for the Teaching of Thinking*.

First, use support material ■ E.3, the everyday food-related experiences checklist, to help students assess their past experiences and skills. Next, have students complete the course-related subject matter checklist in support material ■ E.4. Finally, have students complete the intellectual and social skills checklist in support material ■ E.5. Remind students that the skills identified in this checklist are related to practical reasoning and were introduced in modules A through D.

Conceptual Statements

- *Communicative interaction is oriented toward reaching an understanding about what action to take regarding food-related concerns.*

- ... *The process involves educating oneself and others about dimensions of context that affect the accomplishment of goals related to the work of the family.*

- ... *This knowledge is used to communicate with others about family goals. Families can join together in a cooperative effort, exchanging and testing ideas and making decisions as a group.*

- *Reflective action involves critically examining myths, assumptions, and beliefs underlying food-related actions.*

- ... *When communication breaks down, families can use critical reflection to identify factors that prevent or limit the pursuit of common interests and goals.*

- ... *Sometimes psychological (internal) or social (external) factors block thinking.*

Psychological blocks include a technical mindset, hasty conclusions, and hidden assumptions regarding food.

Social blocks include hierarchical patterns of authority and distorted communication (such as unwarranted or excessive praise or punishment to shape food attitudes). The use of persuasive techniques that deceive also distort communications.

- *Technical action involves examining technological information to generate alternative means to accomplish goals and transforming information about means into action strategies.*

Directed Activities

After they have completed the checklists, ask students to share some of their experiences and stories from support material ■ E.3. (The storytelling process used in support material ■ D.3 illustrates how narrative storytelling is used as a mode of inquiry.) Refer back to scenes from the movie to help students connect their own experiences with those of the characters in the film story.

► **Teacher note:** This is another place to help students make connections between past experiences, learning in school, and those intellectual and social skills needed in the family in order to take reasoned action regarding food. The purpose of this learning experience is to encourage integrative thinking and learning. To extend learning, ask students to create and explain metaphors to show the connections they are making. David Deschler's chapter "Metaphor Analysis: Exorcizing Social Ghosts," in *Fostering Critical Reflection in Adulthood* (1991), gives more detail on the metaphor analysis process.

Then, in a large group, ask the students to summarize what they learned about themselves and others, and what this tells them about the skills needed in family and community action. To help students see how what they have learned fits into the practical reasoning process, have them list some of these skills under the headings in the diagram in ■ E.2. This will help them see the relationship between the specific understandings and skills they have been learning in the course and the practical reasoning process. Encourage students to set new learning goals based on their checklist results. They may draw on these learning goals later in the module when brainstorming family concerns and potential action projects.

Using practical reasoning. This directed activity focuses on developing and practicing the practical reasoning process using support material ■ E.6 to guide students as a class in selecting a sample action project. Each part of the activity as described below represents a component of the practical reasoning process. Additional information about this teaching-learning process is provided in support material ■ E.1. Appendix C provides more detail about the practical reasoning process

Introduce the activity by explaining each component of the practical reasoning process in depth. Help students identify the knowledge needed and the intellectual and social skills used in deciding what to do when families

- define their food-related concerns.
- interpret information about context.
- examine valued ends and set goals.
- generate means or action strategies open in the situation.
- examine consequences and risks of means or action strategies.
- combine information in reasoning to make judgments about the best course of action to take in the situation.

Conceptual Statements

... *Fair use of technical action involves open and critical examination of beliefs, the valued ends sought, and the consequences of upholding these goals.*

- *Families should examine alternative action strategies in terms of positive and negative implications and short- and long-term consequences.*

The process of reflective thinking and action can be learned in the family and used systematically in daily life.

- *When used systematically, reflective thinking and action help identify and accomplish food-related goals within the family.*
- *Systematic use of reflective thinking and action also contributes to societal development and the accomplishment of basic social needs and values.*

Directed Activities

Then, in a large group, practice each component of the practical reasoning process by actually selecting a sample action project. Use the questions in support material ■ E.6 to guide the process.

1. Begin by asking students to read the text about defining continuing concerns in the concerns diamond of support material ■ E.6. Using large group discussion, consider the question, What food-related family or community action should be taken by the class? Brainstorm a list of food-related concerns that might serve as the basis for a family or community action project. Examples of possible projects from support material ■ E.1 might be introduced at this point. Also, students might draw ideas from personal learning goals identified when completing the experience and skills checklists.

Assist students in adding, combining, or eliminating concerns from their list by asking, Which food-related concerns are most significant? Why? Which are amenable to change? Why? Continue this process until students have identified one or two potentially significant food-related concerns that might serve as a family action project for the entire class. Encourage students to phrase their concerns as practical questions to investigate for example, What should be done about...? What should I/we create...? What should I/we do about...?). End by asking students to summarize the process of identifying continuing concerns of the family.

2. In order to define the situation in which the question arises, practice the process of interpreting information about the context of a particular food-related concern. Using the questions in the context diamond in support material ■ E.6, help students see how food-related concerns arise in a particular classroom, family, or community context.

Divide the class according to the number of concerns generated in the first part of the process. Ask each group to interpret information about the situation surrounding one of these food-related concerns. Help students identify sources of information about different aspects of context related to that concern.

Ask students to use the questions contained in the context diamond ■ E.6 to guide their investigations. Students may want to divide the questions among group members and then pool their findings before returning to the large group. Share contextual information regarding each concern in the large group. Use this discussion as the basis for selecting one of the food-related concerns, one that is of interest to the entire group. Then, ask students to summarize the process they used to interpret information about the context.

3. As a next step, use the first two questions in the valued ends diamond in support material ■ E.6 as a guide to small group discussion. Focusing on the food-related concern selected in the previous step, ask students to write one or two paragraphs describing their group's vision of success—that is, what results they would want to accomplish in addressing this particular food-related concern and why it is important to do so. Ask spokespersons from each group to share their visions of success. Compare visions, discussing similarities, differences, and the implications of each. Next, help students identify specific goals on which to focus the sample action project. Finally, ask students to summarize the goal-setting process used in this section.
4. Refer students to the questions listed in the means diamond in ■ E.6. Using interpretations of information about the context of the food-related concern and project goals (identified above), ask students to generate a list of means that are open in the situation. Have students search for technical information about specific action strategies that might be used to reach project goals (given the specific classroom, family, or community situation under consideration). Refer back to the experience and skills checklists as sources of information about personal knowledge, skills, and abilities that affect the selection of specific action strategies. Ask students to summarize the process they used to generate alternatives.
5. Ask students to examine the questions in the consequences diamond in support material ■ E.6. Consider the anticipated results and risks associated with the courses of action identified above. Help students find sources of information about potential consequences. Remind students that they will not be able to predict with any certainty what will actually happen, but to look for probable consequences. Then, have them consider what risks they would be willing to take in this situation. Ask students to chart their findings about consequences using one of several graphic organizers to visually depict their thinking, such as spider maps and fishbone diagrams. Several examples of graphic organizers can be found in *The Memory Jogger*™II, by Michael Bassard and Diane Ritter (1994), and *Organizing Thinking: Graphic Organizers*, by Sandra Parks and Howard Black (1990). Other good sources are listed in appendix A.
6. Finally, to complete the series of directed activities in this section, see the description in the judgment box in ■ E.6. Start by pointing out the structure of a practical judgment. (As a sample action project, we should do _____ because _____.) Remind students to use information related to valued ends, context, means, and consequences as they practice forming practical arguments about what to do.

Using the sample action project, ask students to give reasons to support their judgment about the best course of action to take for a class project. The purpose of forming a practical argument at this point is to show the reasoning that goes into judging what to do. The same practical judgment process is used in selecting an individual or small group family action project. It is also used by families individually and collectively to address food-related concerns of the family and society.

Invite students to explore the relationship between this task and previous experiences they have had with argumentation (for example, experiences in modules C and D, in other school courses, in student or community organizations, and in daily life).

Selecting action projects. At this point some students or the entire class may elect to work on the sample family or community action project identified by the class using support material ■ E.6. Others might want to work on individual or small group projects. Ask students to use the same practical reasoning process described in ■ E.6 to select their own individual or small group action projects.

Remind students to reflect on the results from the experience and skills checklists in determining what to do. This will help students think about ways in which their past experiences, interests, and abilities connect to learning in school and to work of the family. If students have difficulty selecting projects, you may want to introduce some additional project ideas contained in support material ■ E.1.

Action planning. In a large group, walk through the action project plan in support material ■ E.7 using the classroom action project idea selected by the class as an example. Ask students who are working on an individual or small group action project to develop their own action plans using the form in support material ■ E.7. Allow some time to confer with individuals and groups about their projects.

Using feedback. Provide opportunities for students to review their action projects, discuss what is happening, get peer and teacher feedback, and make minor adjustments as needed while they are carrying out their projects. Explain the importance of checking progress in accomplishing action project goals.

Using self-reflection. After completing the project, have students assess themselves using support material ■ E.8. Remind them about the importance of monitoring their own learning and setting new learning goals. Help them connect experiences inside and outside school with the knowledge and skills needed to address food-related concerns of the family.

Talk show. Complete the course by having the students, individually or in a large group, write the final episode for the talk show. This talk show should carry out the spirit and intent of prior episodes at the end of modules A through D. Coach students regarding the ways to clarify the intellectual and social skills involved in the final episode. Ask them to role-play the show. The creative work in writing and enacting the talk show provides another means of probing group understanding and can serve as a summative assessment of class accomplishment of course goals.

This reference material provides teachers with the background to help students in making necessary connections and applying what they are learning in a meaningful way. This material also provides suggestions for action projects and approaches to introducing the action project.

Principles of Learning

In module E, students learn the practical reasoning process, a complex thinking process for determining what to believe and do (Reid, 1979).

The learning principles used in the directed activities in module E are based on Robert Marzano's and C. Hutchins' work on complex thinking processes (1985) and on other works related to the development and use of practical knowledge and practical reasoning, many of which are listed in appendix C.

Module E is structured so that students begin by developing a big picture of practical reasoning before breaking it down into component parts. Next, they study each part in some detail to refine understandings and develop the intellectual and social skills involved. Then students have direct experience using practical reasoning to hook these components together. Through this process of understanding, students answer the following questions for themselves:

- What is practical reasoning like? How does it function? Why is it important?
- What are its parts? How does each part work?
- How does it differ from other thinking skills used in the family? What are some other things that might be confused with practical reasoning, but are not the same?
- When is practical reasoning used?
- Why should I know about practical reasoning?
- What do I need to know and be able to do to understand and use practical reasoning?
- How does what I am learning in this course relate to my past experiences? How does what I am learning in this course relate to what I am learning in other courses, in student organizations and clubs to which I belong, and to everyday life?
- How can I best show the progress I am making in practical reasoning?

After coming to an understanding of practical reasoning, students apply practical reasoning skills in a new situation—a specific family or community action project.

The directed activities are organized and sequenced to encourage students' integrative thinking and learning. The directed activities are designed to practice the following skills:

- **viewing a movie** to connect everyday practical problem-solving to practical reasoning and family action,
- **experience and skills checklists** to determine past experiences and skills and course-related understandings and skills that relate to practical reasoning,
- **using practical reasoning** to practice selecting a sample action project,
- **selecting action projects** to determine what family or community action to take,
- **action planning** to implement a family or community project,
- **using feedback** to monitor progress in learning,
- **using self-reflection** to assess learning and set new learning goals, and
- **writing** (and enacting) the final episode of the **talk show** to show evidence of learning.

Potential Sources of Project Ideas

Some sources for identifying potential family and community action project ideas include the results from experiences and skills checklists, FHA-HERO materials (FHA-HERO is a student organization integrated with family and consumer education courses), and books on volunteer service. Food-related FHA-HERO national projects and STAR (Students Taking Action) Events might be integrated with classroom learning experiences.

However, if FHA-HERO activities are used, care should be taken to distinguish practical reasoning from the FHA-HERO planning process. The FHA-HERO planning process focuses on the steps involved in decision making and does not include critical interpretation of context and conceptualization of valued ends. In practical reasoning, students are asked to interpret the historical, personal, and sociocultural context in which practical concerns arise and to examine alternative valued ends before setting more specific goals.

The books listed below contain numerous concrete examples of service learning projects. Some contain true-life stories of people who, in small ways and large, are making a difference in others' lives. Other good sources of information are listed in appendix A.

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Gastil, J. *Democracy in Small Groups: Participation, Decision-making and Communication*. Philadelphia: New Society Publishers, 1993.

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Possible Family or Community Action Projects

The following outline provides some specific food-related family and community action projects organized around the subconcerns studied in modules B, C, and D. The projects are listed as concerns or questions to investigate. Some of these ideas might be introduced when explaining the sample family action project and later when students select their own projects.

Module B: *What should families do regarding the development of food attitudes and norms?*
Changing self-defeating patterns of thinking about food

- Should food be used to control others?
- How should I go about trying and accepting new foods?

Promoting healthy attitudes about food

- What should be done to promote preschool children's nutrition?
- What should be done to secure healthy snack options in our high school?
- What should be done about deceptive food advertising?

Module C: *What should families and society do about food consumption patterns?*

Eating healthier meals or snacks

- What should I do to achieve a healthier lifestyle?
- What should be done about losing or gaining weight?
- What should be done about getting enough fiber in my family's diet?

Planning and preparing special diets (for example, for children, senior citizens, cancer or heart patients)

- What should be done to help my grandparents?
- What should I do about the special dietary needs in my family?
- What kind of snacks should we prepare for the children in our childcare center?

Promoting healthy, safe, and environmentally sound practices

- What should be done about excessive food packaging?
- What should we do to promote recycling in our community (neighborhood)?
- What type of garden should we plant this year?
- What should be done to prevent food contamination?
- What should be done about eating disorders?

Module D: *What ought to be done about getting food?*

Promoting personal health and safety

- What type of lunch program should be created in our school?
- What should be done about shut-ins in our community?

Participating in community programs

- What should be done about feeding the hungry at a homeless shelter?
- What should we do about stocking the food pantry in our community?

Creating global awareness

- What should be done about world hunger?
- What types of food relief programs are needed for emergencies?

Introducing the Action Project

The first time the course is taught, it is advisable to use modules A through E in the sequence they are written. The teacher will be able to see what is involved in each module, how the experiences connect to previous learning, and the logic and flow of the teaching-learning process. In this approach, one would introduce module E—the food-related family or community action project—following module D. It is important to plan for and teach the course in such a way that at least three weeks are available for module E. The amount of time needed to develop course concepts will vary with individual differences in student learning needs and interruptions that might occur during the semester. After teaching the course for the first time, the teacher will have a better idea about timing and places students might get started working on their action projects.

Once the course has been taught this way, the teacher may want to consider introducing the family or community action project earlier in the course. This will allow more time for completing the project. For example, there are advantages to introducing the family action project at the end of module A and then conducting follow-up class sessions that focus on helping students review and apply what they have learned in each module to their projects. This would allow students time to

- consider the ways different aspects of practical reasoning relate to the focus, content, strategies, and resources for their projects;
- identify and investigate new concerns; and
- notice and consider various contextual factors in their lives that affect completion of the project.

Although students may not have fully formed notions about what to do when the project is first introduced at the end of module A, they can begin to think about it, and understanding will grow each time they revisit the project. Follow-up class sessions should focus on the following questions: How does what we have been learning apply to my (our) action project? Are there current news items or other ideas you have heard or seen that might influence your action project?

The number and frequency of project-related classroom sessions will depend on student learning needs and the complexity of the project. For example, after introducing the project at the end of module A (approximately one week), project-related class sessions might be conducted

- once a week (every Friday, for example),
- every two weeks, or
- two or three days at the end of modules B, C, and D.

At least one week is needed after completing module D for project reports and assessment. Individual, team, and large group sessions should be included in the development and implementation of the action project.

Students should have some choice about whether to do the class (large group) project, a small group team project, or their own individual project. The teacher should help students consider their own learning needs and goals and those of the community when selecting projects. Also, care should be taken that conducting the family action project does not become an end in itself. The purpose of the action project activities is learning, that is, helping students integrate conceptual knowledge and the intellectual and social skills learned throughout the course.

Viewing a Movie

Directions to teacher: Use the criteria below to select a movie or use one of the suggested titles. Pick a movie that depicts family action. Since previous modules have focused on individual action within the family, illustrations of group action are preferable. Remember that the emphasis is on deliberate consideration of continuing family concerns.

After the movie, have students answer the questions below to help them see the relationship between the ideas in the movie and the use of practical reasoning about family concerns.

The movie should

- illustrate people interacting.
- include more or less systematic reasoning about continuing concerns of family.
- depict obvious action taken by characters.
- illustrate consequences of actions on individuals, families, and society.
- have an acceptable rating for your school district.

Suggested Movies

<i>Country</i>	<i>Stella</i>	<i>Grapes of Wrath</i>
<i>Cheaper by the Dozen</i>	<i>Kate's Secret</i>	<i>Chariots of Fire</i>
<i>Gone with the Wind</i>	<i>Silkwood</i>	<i>Guess Who's Coming to Dinner</i>
<i>It's a Wonderful Life</i>	<i>For Keeps</i>	<i>Immediate Family</i>
<i>Places in the Heart</i>	<i>Field of Dreams</i>	<i>National Lampoon's Christmas Vacation</i>
<i>Norma Rae</i>	<i>Dad</i>	<i>Parenthood</i>
<i>Mask</i>	<i>The Mighty Quinn</i>	<i>Mr. Mom</i>

Questions

The answers to the following questions can be listed under the six headings on the following page to help introduce students to the practical reasoning process.

Concern

- What is currently happening in the situation depicted in the film?
- What would the individuals or family like to see happen?
- What gaps exist or what needs to be changed?

Context

- In order to make a judgment about what to do in this situation, what aspects of context were considered? In hindsight, what aspects might have been considered? What concepts should have been considered?

Valued Ends

- What valued ends or goals were involved? What conflicts were depicted? Which valued ends did the characters consider?
- What kind of reasoning was used to arrive at the valued ends or goals chosen?

Means

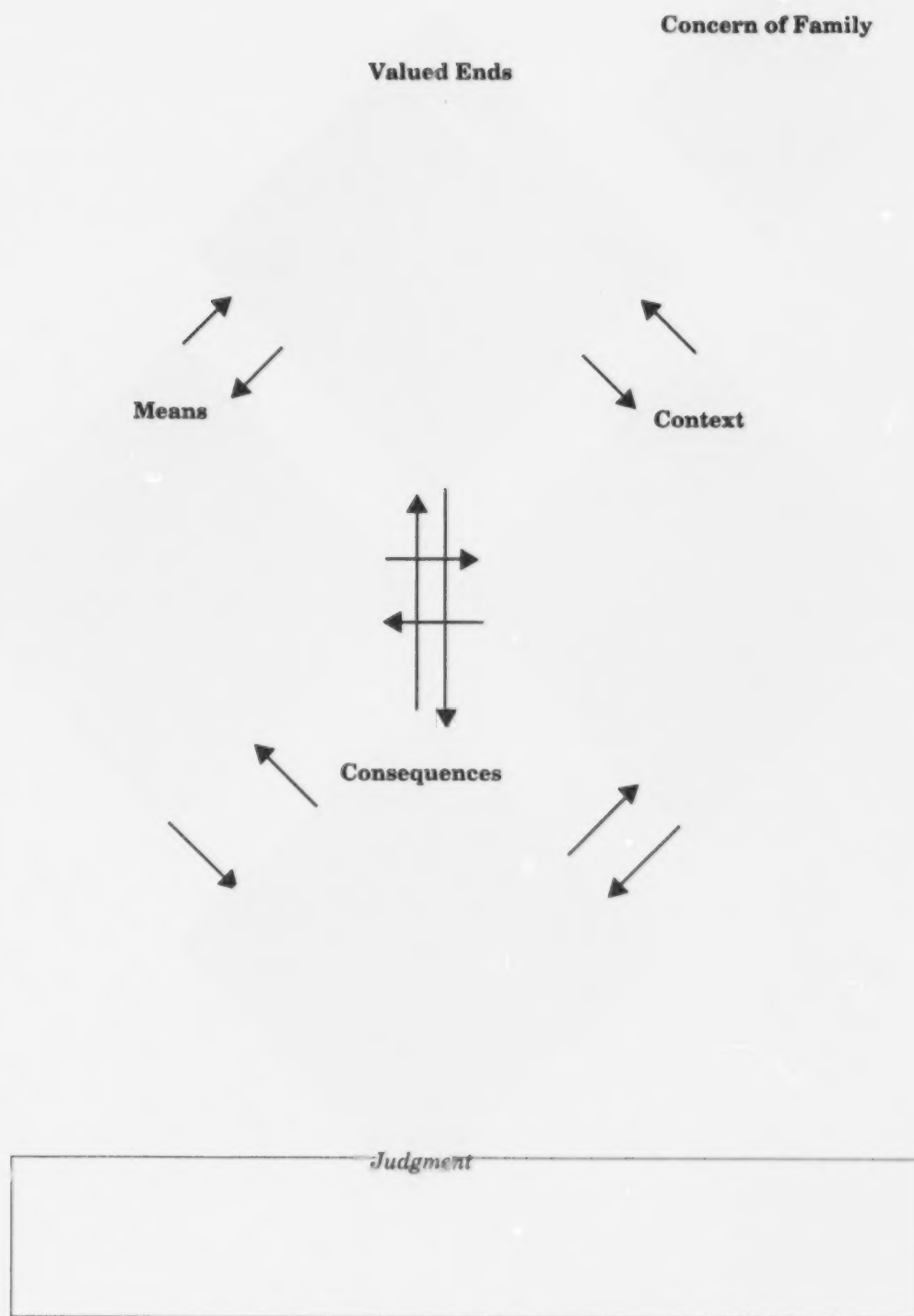
- What alternative courses of action were considered? What other viable alternatives were not considered?

Consequences

- What probable consequences were discussed?

Judgment and Action

- What actions were taken?
- What were the positive and negative, short- and long-term consequences of actions taken?



Everyday Food-Related Experiences Checklist

Directions: The following statements are designed to probe your past food-related experiences. Checking the appropriate boxes will give you a picture of some of the skills you have. These skills are used in taking reasoned action to solve food-related concerns of the family. Check current activities in the left column. Indicate your past experiences by checking the proper response in the right-hand column.

Current Activities	Activities	Past Experiences		
		Often	Sometimes	Never
☐	I have prepared a meal for my family.	☐	☐	☐
☐	I have planted and raised a garden.	☐	☐	☐
☐	I have analyzed my diet for nutritious food.	☐	☐	☐
☐	I have tried to get someone to eat better.	☐	☐	☐
☐	I have joined a food cooperative.	☐	☐	☐
☐	I have studied food-related concepts on my own.	☐	☐	☐
☐	I have given a presentation to others about food-related ideas.	☐	☐	☐
☐	I have joined an organization that is concerned about some aspect of food.	☐	☐	☐
☐	I have explored myths and assumptions regarding food.	☐	☐	☐
☐	I have had a job in food handling.	☐	☐	☐
☐	I have changed the way I eat.	☐	☐	☐
☐	I have planned or used special diets.	☐	☐	☐
☐	I have prepared food for children.	☐	☐	☐
☐	I have planned menus.	☐	☐	☐
☐	I have tried new foods.	☐	☐	☐
☐	I have read food labels.	☐	☐	☐
☐	I have influenced grocery buying practices.	☐	☐	☐
☐	I have prepared foods from basic ingredients.	☐	☐	☐
☐	I have picked, cleaned, and stored apples or other fruits or vegetables.	☐	☐	☐
☐	I have preserved food by freezing or canning.	☐	☐	☐
☐	I have been involved in community service work to help feed people.	☐	☐	☐
☐	I have put together food baskets for delivery to people in my community.	☐	☐	☐
☐	Other experiences (add as many as you want):	☐	☐	☐

Summary Questions (to be used in small groups)

- Describe those experiences in which you collaborated with others to get the food-related taslne.

- Describe any unusual or unique experience.

Course-Related Subject Matter Checklist

Directions: In the right-hand column, indicate the confidence you have in using the understandings you have gained about these concepts to solve food-related concerns of the family. If you would like to learn more about these concepts, check the space to the left of the concept.

Module A. Family's Concern about Food, Its Meaning, and Ways to Obtain and Use It

		Confidence		
		Little/No	Some	Much
☐	basic human needs	☐	☐	☐
☐	meanings of food	☐	☐	☐
☐	powerlessness	☐	☐	☐
☐	other:	☐	☐	☐

Module B. Family's Concern about the Development of Food Attitudes and Norms

		Confidence		
		Little/No	Some	Much
☐	food attitudes	☐	☐	☐
☐	food norms	☐	☐	☐
☐	process of enculturation	☐	☐	☐
☐	social forces	☐	☐	☐
☐	other:	☐	☐	☐

Module C. Family's Concern about Food Consumption Patterns

		Confidence		
		Little/No	Some	Much
☐	patterns of food consumption	☐	☐	☐
☐	undernourishment	☐	☐	☐
☐	overconsumption	☐	☐	☐
☐	consumption of food additives and preservatives	☐	☐	☐
☐	dietary individualism	☐	☐	☐
☐	dietary fads	☐	☐	☐
☐	eating disorders	☐	☐	☐
☐	economic consequences	☐	☐	☐
☐	environmental consequences	☐	☐	☐
☐	transportation	☐	☐	☐
☐	industrialization	☐	☐	☐
☐	emotional attachments	☐	☐	☐
☐	social conditioning	☐	☐	☐
☐	food messages	☐	☐	☐
☐	other:	☐	☐	☐

Module D. Family's Concern about Getting Food

		Confidence		
		Little/No	Some	Much
☐	interdependent relationships involved in getting food	☐	☐	☐
☐	safe food supply	☐	☐	☐
☐	availability and use of resources	☐	☐	☐
☐	control by government and corporations	☐	☐	☐
☐	government distribution of food	☐	☐	☐
☐	laws and regulations	☐	☐	☐
☐	high- and low-profit foods	☐	☐	☐
☐	food processing and handling	☐	☐	☐
☐	obtaining, storing, and using food	☐	☐	☐
☐	global food issues, for example, world hunger	☐	☐	☐
☐	other:	☐	☐	☐

Intellectual and Social Skills Checklist

Directions: In the right-hand column, indicate the confidence you have in using these intellectual and social skills in everyday life as food-related concerns arise. If you would like to learn more about these skills, check the space to the left of each skill category.

Module A: Family's Concern about Food, Its Meaning, and Ways to Obtain and Use It

	Confidence		
	Little/No	Some	Much
☐ perspective taking	☐	☐	☐
☐ determining broad significant concerns of the family	☐	☐	☐
☐ discrepancy analysis	☐	☐	☐

Module B: Family's Concern about the Development of Food Attitudes and Norms

	Confidence		
	Little/No	Some	Much
☐ concept analysis	☐	☐	☐
☐ exploring the meaning of an idea, attitude, or norm	☐	☐	☐
☐ interpreting information regarding the context of a problem	☐	☐	☐

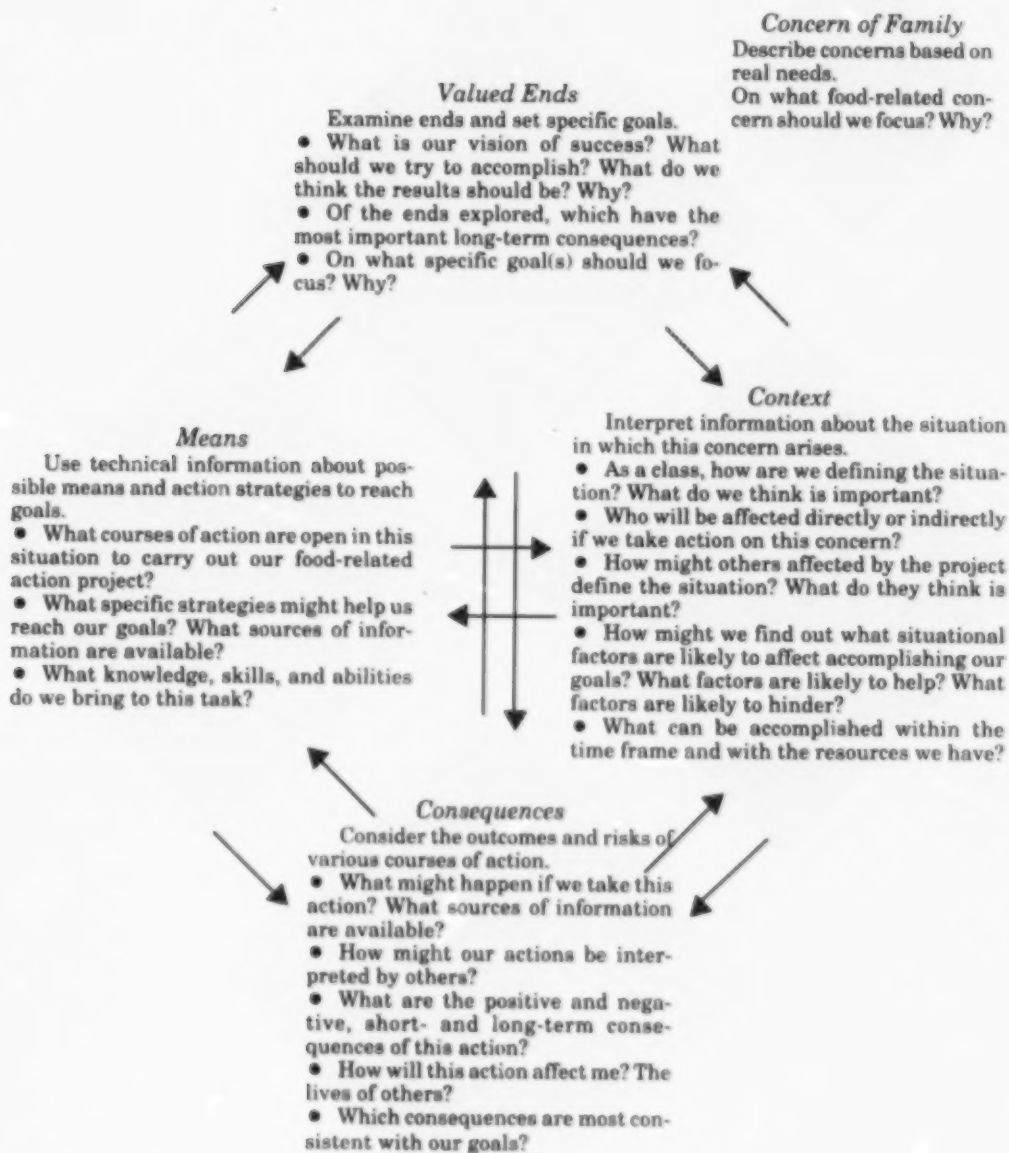
Module C: Family's Concern about Food Consumption Patterns

	Confidence		
	Little/No	Some	Much
☐ resolution of value conflict	☐	☐	☐
☐ critical awareness	☐	☐	☐
☐ evaluating consequences	☐	☐	☐

Module D: Family's Concern about Getting Food

	Confidence		
	Little/No	Some	Much
☐ reasoned judgment (the process of constructing and evaluating arguments)	☐	☐	☐
☐ taking deliberate action	☐	☐	☐

Practical Reasoning



Judgment

The judgment about what action should be taken to address the concern is stated as a practical argument in which information from the other components of the practical reasoning process are given as reasons to support the conclusion about what to do. To determine whether the judgment is warranted, the quality of the reasons and the soundness of the reasoning process used in making the judgment are examined.

- Is the judgment warranted?

Action Project Plan

Directions: Complete and return to the teacher for approval by _____.

These criteria will be used in evaluating your action project proposal:

- completeness of action plan
- completion of action project evaluation
- relevance of project to significant food-related concerns of families in everyday life

Name of project _____

- Explain the project, including a brief description of what you want to do.
- List the subject matter you intend to explore in order to address the concern(s) involved.
- What skills and abilities do you bring to the task?
- What skills and abilities will you be developing?
- Give a description or visual representation (such as a picture, diagram, cartoon, or flow chart) that depicts your entire project.

Teacher's comments and suggestions for improving the plan:



Action Project Evaluation Sheet

Directions: Complete the following questions to assess what you have learned in your family or community action project. Use this information to set new learning goals.

- What did you learn from this experience? Please be specific.
- What aspects of context did you take into account?
- What valued ends did you consider? What specific goals were you trying to accomplish?
- What alternative courses of action did you consider?
- What consequences did you identify and weigh?
- Outline the reasoning you used in constructing an argument to support your judgment about what to do.
- In retrospect, describe the quality of your reasoning.
- Reflect on the intellectual and social skills used in this project. Outline a brief description below.
- In what ways did you take communicative, technical, and reflective action to solve this continuing concern of the family?
- What were the results?
- What would you like to try next time? What questions do you still have?

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Appendixes

2

- A. Further Reading*
- B. Wisconsin's Educational Goals and Learner Outcomes*
- C. The Practical Reasoning Process*
- D. Conceptual Statements*
- E. Teaching About Controversial Issues*

Further Reading

Appendix A contains readings that supplement and extend understandings developed in this teacher's guide. Suggested readings are organized to correspond to the title for that section of the guide.

Preface

Conceptualizations of several family and consumer education content standards and assessment protocols can be found in the following monograph. Recently, state staff members and teams of teachers and teacher educators used the process outlined in the monograph listed below to develop and validate reference set prototypes and illustrative assessment tasks for four teacher's guides: *Family, Food, and Society*; *Family and Jobs*; *Family and Technology*; and *Middle School—Family Work and Careers*.

Strom, Sharon. *Knowing What to Look For: Handbook for Choosing & Defining Outcomes, Developing & Validating Tasks, and Interpreting & Using Results*. St. Paul, MN: Consulting Services, 1992-1994.

More detailed explanations of family and consumer sciences and family and consumer sciences education as a practical and critical science can be found in the following references. Ideas originally developed by Marjorie Brown have been interpreted and applied in Wisconsin and several other states.

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Chapter 2

Several resources of interest to teachers were cited in the Family Narrative, chapter 2. Here are some additional materials that teachers may find helpful as background reading on food-related concerns of the family addressed in this guide. Some readings would be appropriate as reference material for student projects (for example, projects on issues related to critical consumerism, food safety, packaging, nutrition and fitness, trends in eating, and world hunger). The library media specialist in local schools can help identify other new print and audiovisual material.

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Chapter 3

In the emerging family focus approach, curriculum, instruction, and assessment are based on a constructivist metaphor. Thus, students need opportunities to explore, question, and participate in dialogue in order to integrate new ideas. Integrative thinking and learning are more likely to occur if students are intellectually, socially, and emotionally engaged. This requires serious attention to individual differences in learning needs, multiple talents, and diversity in the classroom. These ideas are discussed in more detail in the following references.

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Module D

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Module E

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Future Homemakers of America, Inc. *Student Body*. 1910 Association Drive, Reston, VA 22091. (703) 476-4900.

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- Zimmerman, Robert. *What Can I Do to Make a Difference*. New York: Penguin, 1991.
- Good sources of information about graphic organizers include:
- Bassard, Michael and Diane Ritter. *The Memory Jogger™ II*. Methuen, MA: GOAL/QPC, 1994. See in particular "Cause and Effect: Fishbone Diagram."
- Clark, John H. *Patterns of Thinking: Integrating Learning Skills in Content of Teaching*. Pacific Grove, CA: Midwest Publications, 1990.
- Crank, Joseph. "Looks Do Make a Difference: Graphic Organizers for Learning." *Strategram*. Published by the University of Kansas Center for Research and Learning, 5 (6) (July 1993), pp. 1-4.
- National VICA. "Idea Generation Module." *Total Quality Curriculum*. Leesburg, VA: Education Department, Vocational Industrial Clubs of America, 1993.
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WISCONSIN'S EDUCATIONAL GOALS

VISION

Wisconsin's public schools exist for all students so they have an equal opportunity to attain their highest level of academic achievement, growth, and development.

Public education is a fundamental responsibility of the state. The constitution vests in the state superintendent the supervision of public instruction and directs the legislature to provide for the establishment of district schools. The effective operation of the public schools is dependent upon a common understanding of what public schools should be and do. Establishing such goals is a necessary and proper complement to the state's financial contribution to education. Each school board should provide curriculum, course requirements, and instruction consistent with the goals established. Parents and guardians of pupils enrolled in the school district share with the state and school board the responsibility for pupils meeting the goals.

Educational goals are not all the same. They differ in who implements them, who or what is directly affected by them, and the immediacy of their impact on the classroom. For convenience, the following goals are divided into three major categories: Learner Goals, Institutional Support Goals, and Societal Support

LEARNER GOALS

Learner goals refer to our expectations for students. What should students know and be able to do as a result of their time in the educational system? These goals apply to the students rather than the society or the institutions within which they are educated.

Schools exist for students to learn and to reach their full potential. The first three learner goals are the basis for development of a statewide assessment system and provide the basis upon which students achieve the other learner goals.

THE LEARNER WILL:

1. Build a substantial knowledge base.

Students will build a solid knowledge base developed from challenging subject matter in computer/information technology, environmental education, fine and performing arts, foreign language, health, language arts, mathematics, physical education, reading, science, social studies, and vocational education.

2. Develop thinking and communication processes.

Students will develop a command of thinking processes (analysis, creative thinking, problem solving, decision making, visualizing, concept development) that permit them to interpret and apply the knowledge base. Communication processes (listening, speaking, reading, writing, viewing, image making, and other symbolizing) enable them to communicate thoughts with others.

3. Apply knowledge and processes.

Students will build upon knowledge and apply learning processes to create new ideas and understandings, enhance human relations, expand awareness, and enrich human experiences.

4. Acquire the capacity and motivation for lifelong learning.

Students will develop their natural curiosity to acquire habits of inquiry and a love for learning which will motivate them to continue learning throughout their lives.

5. Develop physical and emotional wellness.

Students will acquire the attitudes, knowledge, and habits to grow physically and emotionally healthy, develop self-esteem and confidence, and exhibit a healthy lifestyle.

6. Develop character.

Students will exhibit personal characteristics, such as compassion, conviction, curiosity, ethics, integrity, motivation, and responsibility.

7. Be a responsible citizen.

Students will possess and exercise the knowledge and processes necessary for full participation in the family, civic, economic, and cultural life of a complex interdependent, global society. Students will acquire an understanding of the basic workings of all levels of government, including the duties and responsibilities of citizenship. Students will make a commitment to the basic values of our government, including reverence and respect for and the history and meaning of the U.S. flag, the Declaration of Independence, the U.S. constitution and the constitution and laws of this state, and acquire a knowledge of state, national, and world history.

8. Be prepared for productive work.

Students will acquire knowledge, capabilities, and attitudes necessary to make them contributing members of a dynamic national and world economy and prepare them for the transition from school to work.

9. Respect cultural diversity and pluralism.

Students will demonstrate the knowledge and attitudes necessary to understand and respect individual and multicultural diversity and to work cooperatively with all people.

10. Develop aesthetic awareness.

Students will become aware of and be able to generate those forms of experience that have artistic and aesthetic meaning.

INSTITUTIONAL SUPPORT GOALS

Institutional support goals have to do with the learning context and environment and are the means that support the achievement of learner goals. They include such things as adequate buildings, adequately prepared teachers, reasonable teacher planning time, and appropriate materials. Many of these factors have a direct impact on the classroom and the students. Institutional support goals deal with conditions that are within the control of the school district through its school boards and administrators, assuming that society has provided the necessary resources. If a goal affects the learning environment and is attainable without action by entities outside the local school district, it is called an institutional support goal.

To accomplish these goals and provide appropriate instruction, adequate resources, time, staff development, funding, technology, and facilities must be available. A governance model that encourages local decision making might better ensure that all parties play a role in deciding the allocation of resources.

INSTITUTIONS WILL:

1. Focus on academic achievement.

The primary mission of schools will include a focus on academic results to ensure that learning occurs.

2. Set high expectations for students and schools.

School staffs, parents, and community members must set high expectations so that all students will achieve the expected educational results.

3. Address the needs of all students.

Schools will recognize the widely varying circumstances and backgrounds that children bring to school and will design strategies and alternative programs to meet the changing needs and diverse learning styles of students.

4. Establish a climate of respect.

The school atmosphere will ensure that students and staff are treated with respect and dignity so that they respect others and so that students are better able to learn.

5. Provide a wide range of educational offerings.

Schools will offer a wide range of curricular and co-curricular activities so that students will have additional opportunities to learn teamwork, cooperation, and the application of learning.

6. Provide an active learning environment.

Schools will provide an environment in which students are actively engaged in learning that connects curriculum, instruction, and assessment.

7. Provide a positive physical setting for learning.

Schools will provide safe and stimulating environments conducive to active learning.

8. Meet the needs of professional staff.

Staff will have the resources, preparation, and encouragement to perform successfully. Staff should have adequate time and financial support for professional development, collaboration in course planning, strategy development, and innovation to meet the needs of children.

9. Establish family partnerships.

Schools will create an environment that seeks the active participation of families to maximize learning.

10. Promote collaboration within the school and community.

Schools and school boards will facilitate collaboration between and among all school staff and community members and connect the curriculum and delivery

SOCIETAL SUPPORT GOALS

Societal support goals, like institutional support goals, are the means that support the achievement of learner goals. If met, they ensure that students will have the necessary foundation to learn. They include such things as adequate health care, adequate nutrition, adequate funding for education, and safe, drug-free environments. These goals have significance beyond the educational community. Still, they have a crucial, if indirect, effect on children's learning. If children are not secure, properly nourished, or in good health, they will find it difficult to learn. If a goal requires action by forces outside the school district structure, it is called a societal support goal.

To accomplish these goals, society must make the commitment to invest in a quality education for all children, ensure that schools are staffed by well-prepared and caring personnel, invest its resources and leadership to ensure that children flourish, and provide support for families to provide a nurturing environment for their children.

SOCIETY WILL:

1. Make children its top priority.

Wisconsin will make the education and nurturing of all children its top priority.

2. Provide fair and adequate funding for education.

Society will act to resolve the disparities among school district financial resources needed to ensure that students, regardless of where they live, meet state educational expectations.

3. Provide safe schools, neighborhoods, and communities.

Society will promote drug- and violence-free schools and communities.

4. Ensure that children at all levels are ready to learn.

Society will provide support for parents and families to meet the ongoing nutritional, safety, physical, and emotional health needs of their children. Parents and families will instill in their children the importance of education.

5. Develop partnerships.

Society will develop partnerships between and among educators, students, parents, community, labor, business, industry, other educational institutions, and government agencies to better serve students and families.

6. Provide educational, cultural, and recreational opportunities.

Society will provide educational, cultural, and recreational opportunities that will enhance the quality of life and learning for all citizens.

7. Enhance educational equity through information technology.

Society will provide the necessary resources for schools to capitalize on information technologies such as telecommunications and computer networks to extend curriculum by using delivery systems such as distance learning.

8. Support local decision making.

The primary mission of state educational governance will be to support local districts, allow maximum flexibility for local decision making and innovation, and employ reasonable measures of accountability. The primary indicator of district effectiveness shall be academic results.

Wisconsin Learner Outcomes

The Department of Public Instruction endorses the following learner outcomes, which were developed by hundreds of educators and other community members from throughout the state. In order for students to demonstrate the outcomes, they will need a solid foundation in the academic subjects of language arts, mathematics, science, and social studies. The outcomes serve as a bridge between Wisconsin's Educational Goals, academic content, and student assessment.

1. **Identify, develop, evaluate, and apply criteria to ideas, products, and performances of one's self or others.**

This outcome requires students to be constructively critical of the work of other persons as well as that produced by one's self. A person should realize when such criticism is objective or subjective. Students should apply criteria developed by themselves as well as those developed by others.

2. **Revise a product, performance, system, and idea in response to relevant information.**

Relevant information might include additional data, changes in a situation, or feedback from experts, peers, or family members. Although the revision may make the item different than it was before, the intent is that the change results in improvement. The expectation is that students will consider all information presented and use that which will result in improvement.

3. **Make informed decisions by examining options and anticipating consequences of actions.**

Familiar sayings such as "look before you leap" and "think before you act" capture the essence of this outcome. Students should gather evidence and information relevant to some contemplated action, weigh the pros and cons of the potential results, and then choose the course of action.

4. **Achieve desired results by interpreting and executing instructions, plans, models, and diagrams.**

This means that students can follow directions in a variety of forms: written, spoken, pictorial, or represented as mathematical symbols. Following directions includes sorting things out when they are not clear as well as evaluating the successful attainment of the desired result. The actual result should be consistent with the intent of the direction-giver.

5. **Recognize and devise systems and describe their interdependence.**

A system is a set of elements that forms a unit or whole. Examples of systems include a musical composition, a game, a procedure designed to solve mathematics problems, weather, ecosystems, and monetary systems.

6. **Create a quality product, process, and performance to meet a need.**

This outcome is a tangible or visible thing or event. It includes paintings, musical performances and compositions, athletic performances, poems or essays, novels, or public policy.

7. **Respond to the aesthetic and intellectual aspects of an event, performance, and product.**

Although similar to outcome No. 6, this outcome focuses on a student's response to something someone else has done. Examples include an opinion, a critique, an essay, and a drawing.

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| <p>8. Transfer learning from one context to another.</p> | <p>Students should identify similar characteristics of two or more situations, objects, or events. Often these characteristics are not apparent, so students need to be analytical. This outcome also involves finding a practical application for a theory and creating new uses for existing products and applications of ideas.</p> |
| <p>9. Recognize, define, and solve a problem.</p> | <p>This outcome focuses on situations that are problematic because the solution is not immediately obvious. The student needs to formulate the problem and eliminate irrelevant information. The effective problem solver uses a wide range of strategies and can often identify multiple solutions.</p> |
| <p>10. Recognize and communicate one's strategies for accomplishing objectives.</p> | <p>Students should reflect upon and explain their own thinking processes. Those approaches should be shared with others.</p> |
| <p>11. Work effectively in groups to accomplish a goal.</p> | <p>Throughout life—at school, within the family, at work—people must cooperate with others to effectively complete a task or project. This does not imply that working independently is not valued; independent working skills are also necessary.</p> |
| <p>12. Defend a position by combining information from multiple sources.</p> | <p>The position or point of view being defended could be one's own or that of another person or group. The position may be of a social, political, environmental, economic, or hypothetical nature. Students must gather information from a variety of sources and then blend that information with their own knowledge to create an argument in favor of a position.</p> |
| <p>13. Develop and test a hypothesis.</p> | <p>A hypothesis is a guess about a rule or relationship among a collection of events, objects, or ideas. Students should devise a plan to identify and collect data, then interpret and use those data to determine whether or not the guess is correct.</p> |
| <p>14. Recognize when a need for specific information exists and demonstrate the ability to locate, evaluate, and use the relevant information.</p> | <p>Students must be able to consult a recognized authority, to extract information from library sources, and to access electronic data bases. This outcome requires students to consider all information, eliminate that which is irrelevant, and then organize what is left into a usable form.</p> |
| <p>15. Conceive of places, times, and conditions different from one's own.</p> | <p>This outcome includes real as well as fictional places, times, and conditions. Students should think about life as it existed in the past as well as thinking about how it might be in the future.</p> |
| <p>16. Identify personal interests and goals and pursue them.</p> | <p>Students should work persistently over time on ideas, activities, projects, and goals that reflect their abilities, talents, and interests.</p> |
| <p>17. Recognize the influence of diverse cultural perspectives on human thought and behavior.</p> | <p>The term "culture" includes groups that share a common history or have a linguistic, racial, geographic, social, or occupational bond that may affect the way people act. Examples include the civilizations of ancient Greece; the Incan Empire; and Hispanic, African, or Asian cultures.</p> |

The Practical Reasoning Process

This appendix provides an overview of the practical reasoning process and reference material for those who seek a deeper understanding of the way practical reasoning works, its purposes, components, and the relationships among components. This overview is based on articles by Sharon Strom published in various sources. The overview supplements ideas about practical reasoning introduced in the guide. Figure 1 identifies some of the key concepts and terms associated with practical reasoning.

Practical Questions

Practical reasoning starts with feelings of concern, which are subjectively experienced as challenge and opportunity, awareness of difficult choices or discrepancies, confusion and uncertainty, frustration, dissatisfaction, doubt, or feelings of powerlessness. As critical understanding of the context of these concerns develops, concerns are formulated as practical questions about what to do.

Families and educators encounter difficult practical questions in everyday life, such as those listed below.

Family Questions

- What should be done about the development of family members?
- What should we do about meeting the basic material needs of the family?
- Should we adopt this community policy? Is it really supportive of family interests?
- What should be done to change business practices that interfere with the family?

Educator Questions

- What should students learn in family and consumer education courses?
- Should we use this material to enhance student learning?
- What should be done to improve school practices?
- What should be done about defining or redirecting family and consumer education?

Although these questions emerge in different settings, each set has similar characteristics. Practical questions

- grow out of a gap between what is and what should be,
- pose complex value questions about what to do,
- continue over time and recur in different generations and situations,
- occur in a specific social and historical setting involving a unique combination of people, events, and circumstances, and
- are answered by taking reasoned action.

Of the variety of practical questions that arise on a daily basis, only those that are determined to be significant warrant special attention. Some criteria for determining significance of questions include that people are forced to choose between important values; that action is likely to affect human and societal development; and that existing conditions are degrading, cause unnecessary human suffering, or interfere with accomplishing goals.

Rather than asking for techniques or procedures, significant practical questions require careful consideration of which norms and which course of action are most appropriate under the circumstances. Because answers to practical questions apply to a particular situation, the action taken does not necessarily answer the question for all time. The same question comes up again and again in different contexts and in different generations.

Concepts Related to Practical Reasoning

Practical, as distinguished from *theoretical* or *technical*, is used to refer to action, conduct, or practice; a process of making complex value judgments; and an interdependent relationship between thought and action. This usage differs from other common meanings of practical, such as that which is immediately expedient or useful. Common terms associated with practical include the following.

Practical problem or concern. The gap between the current state of affairs (what is) and the state of affairs considered desirable (what should be). Practical problems vary in terms of significance and level of abstraction. Continuing concerns are broad questions of social significance that continue over time and across generations.

Practical question. The statement of a practical problem or concern in the form of a question about what action to take. The process of forming the question is diagnostic: defining the problem or concern in terms of real rather than apparent needs and determining significance. This process is sometimes called problem finding, problem framing, or problem setting.

Practical reasoning. Intended as a guide to action, practical reasoning involves reflective judgment to provide an answer to a practical question. Judgment focuses on what course of action will best solve a problem or answer the question. The judgment is stated as a principle: *I/we ought to do ...* Factual and value reasons from four knowledge domains are given to support the judgment.

Resolution of a practical problem or concern. The decision about an action to take involving the commitment to act on the results of practical reasoning: *I/we shall do...*

Solution of a practical problem or concern. What is done or the action taken in a situation. The action is considered rational if it is governed by reasons and sound argument.

Practical discourse. Communicative action taken to identify, critically examine, and resolve practical problems or concerns. This communal form of inquiry is undertaken to resolve conceptual differences. It is oriented toward clarifying intentions, negotiating shared meanings, and reaching consensus. This process involves the application of intellect. The ideas explored have substance, and there are standards and procedures for examining them. The relationship among participants is dialogic. The process results in a practical argument.

Practical action. Doing something based on deliberation and thought in contrast to impulsive or habitual reactions. Efforts focus on solving a practical problem in an innovative way. Three types of reasoned action contribute the process of finding solutions:

- managing the environment to satisfy basic needs (**technical action**)
- understanding and communicating with others about common concerns (**communicative action**)
- critically examining self-defeating patterns of thinking and acting that affect accomplishment of personal and societal goals and justifying goals (**reflective action**).

Practical Reasoning

Many different views exist about what constitutes practical reasoning. The further reading section at the end of this appendix provides a sampling of some of these views. According to curriculum theorist William Reid (1979), practical reasoning is a skilled intellectual and social process of inquiry used in addressing and answering practical questions. It involves the organization and use of knowledge, including values, in providing reasons to support judgments about what to believe and do. This process differs from other ways of arriving at conclusions about what to believe and do. For example, although judgments may be based on reason, sometimes they are based on unjustified beliefs, appeals to tradition, or means-ends thinking. Means-end thinking focuses on finding a way to accomplish an end without necessarily questioning the worthiness of the goal or its moral defensibility.

Practical reasoning is a deliberately social process; it requires collaborators who cooperate in seeking mutual understanding and developing rational consensus about what to do. When questions about understanding and truthfulness of feelings and motives arise, they are resolved by further conversation to clarify intentions and negotiate shared meanings. Challenges about the truth of factual claims or the rightness of norms and values are resolved through practical discourse. The persuasive force of an argument is determined by its adequacy, relevance, and coherence (Engel, 1990; Makau, 1990).

Practical reasoning synthesizes a number of different ways of knowing or modes of inquiry. Figure 2 shows the *four knowledge domains* used to answer significant practical questions (Strom, 1986b and 1991; Strom and Plihal, 1989). Concepts and processes listed in the categories show the kind of thinking and acting involved in each knowledge domain.

- Know why—examining and justifying valued ends and goals
- Know with—interpreting information about context
- Know how—identifying means and action strategies
- Know that—considering consequences and weighing risks

Understandings about valued ends and goals, context, means, and consequences are assembled in each practical situation from several sources. These complementary modes of inquiry, each with their own standards of verification, are used in reorganizing existing knowledge in a particular domain or in creating new knowledge where none is available (Brown, 1989).

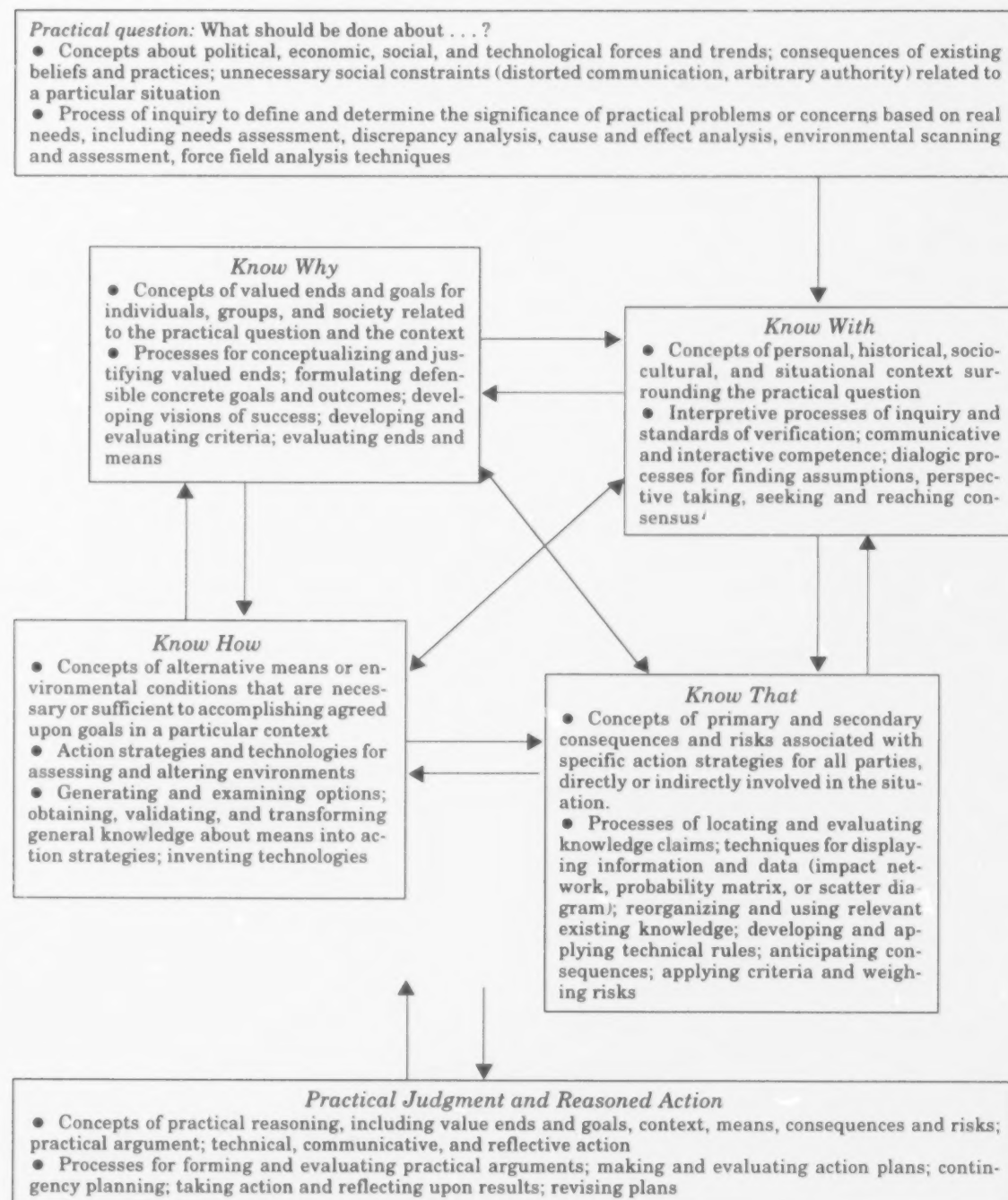
The practical reasoning process links the four knowledge domains. Rather than following a step-by-step sequence, reasoning moves back and forth among the domains as value and factual claims are interpreted and examined, as indicated by the directional arrows in figure 2. Depending on the situation, people enter the practical reasoning process at different points. For example, they may engage in practical reasoning as a prelude to action, or in retrospect to reflect on the consequences, purposes and justification for action, or when they realize action strategies are no longer working in a particular situation and there is a need to rethink goals and means.

The structure of thinking involved in practical reasoning includes the following set of interrelated mental activities:

- reasoning to frame the question that requires action using understanding of the historical, personal, and sociocultural context in which the question emerges;
- reasoning to interpret the dynamics of the situation, clarify distorted understandings and situational constraints, and construct interpretive explanations about the particular situation;
- reasoning to describe and justify valued ends and goals based on whose wants are affected and which wants are legitimate;

Figure 2

Relationships Among Components of Practical Reasoning



- reasoning to apply technological information about possible means and action strategies to reach goals;
- reasoning to examine the probable primary and secondary consequences of specific action strategies open in the situation and weighing the risks to oneself and others affected by the proposed actions; and
- reasoning to judge the best course of action, reaching a conclusion using understandings from the four knowledge domains.

Practical concerns and questions arise in a unique context. That is, they are experienced by particular individuals at a specific time and in a unique setting. Individuals and families formulate goals and take action to answer these questions within the limits set by the context (*know with*). Interpretations of information about context should reflect an understanding of the historical circumstances, the intentions of the people involved, and various elements of the situation that give meaning to the concern (Schön, 1983 and 1986).

Sometimes existing social arrangements, such as hierarchical patterns of authority and distorted communication, that have evolved historically within the family and in society prevent the family as a social group from recognizing and pursuing common interests and goals. These conditions limit the family's ability to frame, critically examine, and answer practical questions encountered in everyday life, including concerns about the kind of life to create and live. When this happens, although often unaware of being stuck, individuals and families experience blocks in judgment and action (Henrie, Strom, and Wilkosz, 1979/1983).

For example, a technical mind set, in which only parts of a problem are examined or complex problems are reduced to technical questions, has led to self-interest in some families, overly simplistic thinking, diminished interest in reaching an understanding about values and norms, and less freedom for family members to collaborate in reasoned action to accomplish family goals (Strom and Plihal, 1989). Additional sources that address technical modes of thought are listed in the further reading section at the end of this appendix. It is under these conditions, when communication is inadequate or distorted, that the need for reflective action arises (Habermas, 1979). Mature family members can provide guidance to work through the discrepancies and the conceptual or interpersonal conflicts involved (Brown, 1988a, 1988b).

Through critical inquiry, individuals and families develop insight about personal beliefs and unnecessary social constraints that limit freedom to learn and grow (Plihal, 1987; Strom, 1986a). This process involves treating the current situation problematically and probing beneath surface realities for explanations of how these situations might be altered (Connolly, 1974 and 1979). As a result, families come to see their action in relation to the historical, personal, and sociocultural context in which it is embedded. They gain an understanding of the nature of the problems or concerns they face, develop insight about their real needs and values fundamental to, and clarify long-term consequences of alternative courses of action to address these problems.

Interpretations of the dynamics (*know with*) of the situation are used in reflective and critical discussion about the appropriateness of goals (*know why*) and alternative action strategies (*know how*). Reasoning to clarify the state of affairs in a specific situation helps people *know why* they propose to seek certain goals. The conceptualization of valued ends provides the basis for setting concrete goals to achieve. It also serves as criteria for judging whether goals have been accomplished. The goals identified are critically examined for their meaning and worth. Justification is given in terms of basic values fundamental to human and planetary existence and the human and social consequences of pursuing these goals. However, goals are not formulated outside of the context in which the concern emerges.

On the basis of the goals and the context of the concern, possible actions are considered as means (*know how*) to achieve the goals. Since technical rules cannot tell one how to act

concretely, technological knowledge (*know that*) is transformed into action strategies appropriate in the given context.

Reasoning about the probable primary and secondary consequences of specific actions involves the application of knowledge (*know that*). However, because it is not possible to predict with certainty what will happen as a result of these actions, it is necessary to weigh the risks involved and decide which ones are acceptable. The consequences should match as close as possible the goals being sought. Thus, action strategies are examined in terms of understanding probable consequences and in light of criteria used in judging the accomplishment of goals.

Practical Judgment

Practical judgment about what to do in a particular situation consists of interrelated sets of reasons linked through reasoning to conclusion about the best course of action to take. This argument may be offered at the outset as rationale for action or in retrospect as justification for action taken.

The format of a practical argument consists of the judgment followed by several reasons given to support it: This action should be taken because it has the best set of consequences with the least risk (*know that*), under these conditions (*know with*), with these goals being sought (*know why*), and with the strategies open to us in this situation (*know how*).

Soundness of a practical argument results when the reasons given are true and the conclusion is validly derived from them. Furthermore, the reasoning should demonstrate the likelihood that specific action strategies will work and their moral defensibility. Standards for judging the adequacy of reasons vary with the type of claim being made. Principles of rationality and morality are both applied in determining the legitimacy of reasons. For example: Are *factual claims* accurate and relevant? Are the *interpretations* offered sincere portrayals of intentions? Are *norms* appropriate to the situation? Have sufficient justifications been provided for *value claims*? Are *illustrations* apt? Are they meaningful and to what degree? Is *wording* clear? (Brown, 1980 and 1989; Engel, 1990; Habermas, 1979; Joh, 1975; Makau, 1990; Paul, 1993; Strom, 1992-1994)

The judgments made in the practical reasoning process are not absolute. They are provisional conclusions that reflect what has been determined to be the best thing to do under the circumstances and with the people involved. Practical judgments may be revised with new information, new experience, or new conditions. Sometimes people do not act on their practical reasoning, but the rational culmination of this reasoning process is action. The answer to a practical question is found in doing something, and frequently action brings re-evaluation and recycling of the reasoning process (Argyris, Putnam, and Smith, 1985; Carr and Kemmis, 1986).

If the goals are achieved through the action taken, the practical question is answered. However, knowledge of alternative actions appropriate to different contextual situations or conditions is often needed because contexts vary and change over time. When the outcomes are unacceptable in the context, reasoning moves back to the consideration of other means and the process begins again. Thus, there is an interdependent relationship between thought and action.

At times the valued ends cannot be accomplished through existing means, although it might be possible to achieve a less desirable set of goals. When this occurs, gaps in the knowledge base are identified as areas for further study.

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Conceptual Statements

Module A

▼ **Throughout history, food has been a concern of individuals, families, and societies.**

A continuing concern of family is something that recurs over time, is experienced by all people, and may have positive or negative aspects.

Food has been a concern of people over time because it satisfies basic human needs.

- People need food for physical growth and development.
- Individuals and families use food to meet other basic needs for security, acceptance, self-worth, and self-fulfillment.

Individuals and families associate multiple meanings with food, thereby creating other concerns. People attach the following kinds of meanings to food:

- Physical meanings include health, energy, and strength.
- Social meanings are attached to food when food is coupled with relationships, status, unity, identity, celebration, power, and control.
- Emotional meanings involve feelings that are experienced in relation to certain foods.

Food is a continuing concern because the tasks involved in obtaining and using food are complex and occur on a daily basis.

- Several personal and societal factors contribute to this complex condition:
 - ... limited resources,
 - ... socially conditioned patterns of thinking and acting,
 - ... rapid social change,
 - ... conflicting information and misinformation, and
 - ... social forces such as school, religion, government, and business.
- Because of these factors, individuals and families may feel powerless.
- As a result, food attitudes and practices might develop that have serious consequences for people. These practices may have harmful, nonreversible effects on human development, thereby limiting or preventing the accomplishment of family and societal goals.

Families may use one of two strategies to address complex concerns.

- They may oversimplify to the point that context and goals are ignored.
- They may use the intellectual and social process of perspective taking to address the complexity of food-related situations.
 - The process of taking another's point of view involves exploring how different people would view particular events, conditions, or elements of the situation.
 - ... It entails learning about that person's or group's beliefs, values, and feelings.
 - ... In this process, thinking moves back and forth between one's own ideas, feelings, and experiences and those of others.

▼ **Because there are so many food-related concerns, individuals and families need to learn the process of determining which questions are most significant.**

Four significant food-related continuing concerns are the development of food attitudes, patterns of food consumption, obtaining food, and taking action in regard to food.

- To determine significant continuing concerns, individuals and families must consider how specific concerns relate to larger, more general ones.

— A significant continuing concern

... recurs over time.

... has multiple, far-reaching effects or consequences (for example, if action is likely to affect human or societal development or if existing conditions are degrading, cause unnecessary human suffering, or interfere with accomplishing goals).

... requires choice between ideals or values.

... is amenable to change so action can be taken.

— Continuing concerns grow out of discrepancies between what currently exists and the needs, wants, and goals of people who are involved in the situation.

▼ *The role of individuals and families in regard to these food-related continuing concerns is to take reasoned action.*

Learning and using intellectual and social processes will assist individuals and families in taking reasoned action.

— Some patterns of thinking and acting hinder while others promote learning about food.

— Creative and critical thinking help families address and solve food-related concerns.

— Patterns of thinking and acting are often learned in the family, beginning in early years, and should be continually examined for appropriateness and reasonableness.

Gaining a sense of control over one's thought processes and actions is necessary in order to take reasoned action.

Module B

▼ *Families have a continuing concern about the development of food attitudes and norms.*

Food attitudes are a collection of interrelated ideas and feelings held by individuals, families, and societies.

Food norms are social standards or expectations that influence thinking about food.

— Norms bind members of a group and serve to guide, control, and regulate behavior.

— Families can use concept analysis to identify personal and societal distortions regarding food attitudes and norms. They can use it to reach an understanding about what those norms mean to them.

— Concept analysis is the thinking process used to consider the specific meaning of a concept. It is also used to distinguish between two or more concepts that have similar meanings or have an important relationship to one another but have different meanings.

Concept analysis involves

... identifying characteristics of the concept(s) being considered.

... considering concrete examples of the concepts in everyday life.

... determining the significance that the concept has in everyday life.

— When families explore the significance of food in their lives and develop new norms, they use the communicative system of family action.

Food attitudes and norms vary among individuals, families, and societies.

— Because food attitudes and norms are closely linked with food-related behaviors, it is important to consider how variations in attitudes and norms may lead to variations in behavior.

— The consequences of holding different food attitudes and norms are manifested in many ways and at all levels (individual, family, and societal).

▼ *Three current attitudes about food (and the norms regarding acceptable food-related behavior that are connected with them) are of particular concern to the family.*

Food is an unlimited resource.

- Taking food for granted may result in unquestioned buying of food based on unclear criteria.
- Some people develop excessive expectations about the amount of resources they deserve.

Food is a means of enjoyment and pleasure.

- Through the creation of new food forms and food-processing equipment, technology reinforces feelings of excitement and pleasure regarding food.
- While enjoying food itself is not a problem, it can become a problem when people overemphasize self-gratification.
- More problems develop when social distinctions are created between those who can and cannot afford certain types of foods and food-processing equipment.

Food is a way of maintaining power and control over others.

- Some people and groups use food as a means of manipulating and controlling others.
- When food is used to control others, it serves the interest of just a few people.

▼ *Individuals develop food attitudes and norms in the process of growing up and experiencing life in a particular group.*

Enculturation is the process by which food ideas and norms are passed from one group of persons to another.

- Enculturation begins early in life in the family and continues over time.
- It includes both formal and informal instruction.
- This instruction takes different forms.
 - ... Modeling occurs when behaviors displayed in the family are copied or imitated by others.
 - ... Food can be used as a reward. Denial of food can be a method of punishment.
 - ... Direct experiences consist of both good and bad experiences such as being forced to eat everything on one's plate, having allergic reactions and liking food that tastes good.

Reasoning about food-related experiences involves deliberate thinking and critical reflection. This may lead to change.

A number of social forces convey ideas, attitudes, and norms.

- Influential social forces include the family, schools, government, corporations, media, religious organizations, as well as popular culture, in which movie stars, athletes and singers are role models.
- Some of these are viewed as being more powerful and influential than others in the development of food attitudes and norms.
- Recognizing the power of social forces to shape and change food-related attitudes and behavior is important so that individuals and families can play a role in influencing these forces.
 - ... Some food norms may not be appropriate or in the best interest for all people in a society.
 - ... Individuals and families may choose to follow or deviate from the food norms presented by the more powerful forces.
 - ... Individuals and families can exert a positive influence in society by offering alternative attitudes and norms.

▼ A combination of factors influence the family's ability to develop desirable attitudes toward food and appropriate norms to guide their food-related behaviors.

A desirable food attitude or norm is one that has been critically examined for worth and for the possible consequences it may have on individuals, families, and societies.

To promote the development of desirable attitudes and norms, the family needs to establish a nonthreatening environment so that open dialogue between members can take place.

- A nonthreatening environment allows family members to share feelings and ideas regarding food.
- As they mature, family members should be encouraged to question their feelings, ideas, and reasoning processes.
- This process allows family members to examine the complexities of food attitudes and norms and to consider integrating new ideas into those already developed.

The ability to explore the meaning of ideas also contributes to the development of desirable norms.

- Exploring the meaning of food norms helps family members clarify distortions.
- Understanding the consequences of upholding particular food norms helps families clarify their food attitudes.

Desirable norms are more likely to develop when family members think deliberately and critically about attitudes, norms, and ideas regarding food.

- Conscious ideas are those that people are aware of and can articulate to others.
- Unconscious ideas are taken for granted, are unexamined, and are not readily verbalized to others.
- Unconscious and conscious ideas may be either healthy or harmful.

▼ Significant questions regarding the development of desirable food attitudes and norms arise in a particular context.

Contextual factors are conditions in the setting that influence the development of attitudes and behavior.

Interpreting information about contextual factors leads to greater understanding of the concerns families have.

- Families can interpret information about contextual factors by gathering data about the development of particular food attitudes and norms. They can use a number of information-gathering techniques, such as asking questions, observing, and reading.
- By asking a variety of higher-order questions and gaining more contextual data, individuals and families gain insight into how their own situation reflects a larger societal concern. Higher-order questions refer to thinking levels beyond memory and factual retention. For example, "How do norms held in the family reflect patterns of thinking in society?"
- Once these higher-order concerns are identified, families can use these interpretations of contextual information to set goals for addressing and solving their continuing concerns about food.

Module C

▼ Individuals, families, and societies have concerns about patterns of food consumption.

Patterns of food consumption are any repeated or organized way of thinking or acting related to eating and using food.

Some considerations in looking at food consumption patterns are availability and type of food, timing of meals, location of meals, and the social quality of the interactions that take place when foods are eaten.

— Availability and type of food

... Currently, a variety of foods are available year round.

... Packaged convenience foods are eaten by an increasing number of individuals and families.

— Timing of meals

... Snacking and grazing have become common practices that replace the family meal.

... Individuals and families in highly industrialized countries now tend to eat whenever they are hungry, regardless of the location and the people around them.

— Location of meals

... More meals today are eaten away from home at food service establishments or in a car.

... Eating outside the home may be changing patterns of family interaction and socialization of children. Parents may be more concerned about children's behavior in a public place and less concerned about what is eaten and the type of family interaction that takes place.

— Social interactions relating to food

... Prepared foods have led to more individualized eating patterns because they allow family members to prepare meals alone.

... Children are less apt to have parents or other adults monitor their food choices for nutritional balance.

Another way to examine concerns about patterns of food consumption is to divide them into groups: (1) immediate versus continuing concerns, and (2) personal versus social concerns.

— Using these two groups, patterns of food consumption can be classified into four categories:

... specific or short-term personal concerns,

... specific or short-term social concerns,

... general continuing personal concerns, and

... general continuing social concerns.

— When thinking about contemporary examples of food consumption patterns, the majority tend to be more immediate, specific, and personal in nature; however, the patterns of food consumption considered most desirable are more general, continuing, and social in nature.

When current patterns of food consumption are compared with the valued ends that individuals and families consider desirable, two discrepancies emerge.

— The first is confusion about what to believe and do resulting from the complexity of food consumption situations.

— The second is conflict between competing values that are held by the people involved in these situations.

... Competing values include physical health, social well-being, efficiency, caring, responsibility, and economics.

▼ *Confusion and conflict limit efforts to resolve continuing concerns about patterns of food consumption.*

Confusion over beliefs or actions, and conflicting values frequently interfere with thinking about family needs and goals.

— Some individuals and families take action to meet perceived needs instead of acting on their real needs.

- ... Real needs are those that are basic to human existence, including physical needs for food and water, and psychological and social needs for security, acceptance, space, and a sense of confidence.
- ... Perceived needs are those that people come to think they need through their own observations and experience and through the efforts of others to influence their perceptions.
- Clarifying real needs requires reflecting on one's own motivations and the motivations of others.
- To distinguish motives that are deliberately manipulative from those that are in everyone's best interest, individuals and families need accurate information about the consequences of pursuing alternative goals.
- Judging credibility involves asking questions about the source's consistency and trustworthiness.
 - ... Credible sources have a track record of honesty.
 - ... They are in a position to be knowledgeable about the subject.
 - ... They do not have a vested interest in influencing another's beliefs.
 - ... They usually agree with other reliable sources of information.
 - ... They give reasons to support the value judgment.

Confusion and conflicting values frequently interfere with individual and family thinking about the consequences of current food consumption patterns.

- Although the physical consequences of contemporary consumption patterns are not fully known, researchers have linked several life-threatening diseases to undernourishment, overconsumption of food, and excessive consumption of food additives and preservatives.
- The social consequences include increased individualism, decreased social interactions, and increased social distinctions between the haves and the have-nots.
- Emotional consequences of contemporary food consumption patterns (dietary fads and eating disorders) include self-esteem and body image problems.
- Economic consequences range from the reallocation of money for food in families to economic imbalances at the global level.
- The destruction of the environment and the need to dispose of food-related waste are the most significant environmental consequences.
- These types of consequences, although distinguishable, are complex and interrelated; for example, the effects of an eating disorder are physical, social, emotional, and economic.

Confusion and conflicting values may limit the development of the critical thinking skills needed to address and solve food consumption concerns.

- An effective critical thinker is more likely to
 - ... organize information into frameworks or perspectives.
 - ... deliberately take another's perspective.
 - ... consider ideas from multiple perspectives.
 - ... deliberately suspend judgment until he or she has sufficient evidence to support factual and value claims.
 - ... be aware of biases, opinions, and values that may be distracting.
 - ... make sound, deliberate evaluations using criteria that have been critically examined for implicit values.
 - ... insightfully discuss evidence by using active listening and questioning skills.

▼ ***Certain aspects of context influence patterns of food consumption.***

Historical aspects of context include both personal and social experiences.

— On a personal level, each individual and family brings a unique personal history to a situation.

— On a societal level, transportation and industrialization have influenced individual, family, and cultural patterns of food consumption.

... A wider variety of foods is available year round as a result of advances in transportation.

... Industrialization has created a greater variety of food products.

Personal aspects of context include the emotional attachments individuals and families associate with food.

— Emotional attachments to particular foods occur through social conditioning in the family.

— Food consumption patterns resulting from this social conditioning may not be consistent with the best available information.

Sociocultural aspects of context include social conditioning resulting from food messages conveyed through the media, businesses, and industries.

— Social conditioning occurs as individuals and families receive repeated messages concerning food consumption from a variety of sources.

— The media uses repetition and other persuasive techniques to convince individuals and families to believe certain ideas about foods and food practices.

... These ideas and practices may conflict with traditional beliefs and current knowledge about what is considered acceptable to eat or do.

... The motivation of the media may not be in the best interest of individuals and families.

— Some businesses and industries strive to make money regardless of the consequences to the consumer. This includes the promotion of specific foods or food habits that are known to be detrimental to health.

— As a result of social conditioning, some individuals eat more or less food than they need to nourish their bodies.

Examining contextual factors leads to greater understanding of the concerns individuals and families have about patterns of food consumption.

— The process of interpreting information involves gathering data regarding the development of food consumption patterns. This is done to develop insight into how existing conditions contribute to food-related concerns.

— By asking higher-order questions and gaining more contextual data, individuals and families are better able to see how their own situation reflects larger societal concerns.

▼ ***Learning thought processes and applying them daily enables individuals and families to work together on addressing and solving continuing concerns about food consumption.***

Development of critical awareness will help prevent individuals and families from responding to concerns about food consumption in unthinking ways.

— The process of critical awareness involves learning to look for external and internal blocks to thinking.

... External blocks to thinking include deceptive communication, unreliable sources of information, and social pressures on individuals and families. For example, the media perpetuate numerous stereotypes about people who are overweight.

... Internal blocks to thinking include irrational or self-defeating patterns of thinking, such as making hasty generalizations, overreliance on authorities for answers, either/or thinking, and labeling.

- Being critically aware of one's own and others' thinking involves asking six questions:
 - ... What gaps, ambiguities, or inconsistencies are present in the evidence being presented?
 - ... What assumptions are being made in the position being presented? (Are bias or ethnocentrism present? How do they preclude, limit, or prevent one from making reasonable interpretations or drawing sound conclusions?)
 - ... What alternative interpretations of the evidence are possible?
 - ... Which of the interpretations provides the best explanation of the evidence?
 - ... Who benefits most from actions based on these interpretations?
 - ... What are the probable consequences for all people involved in the situation?

In addition to being aware of blocks to critical thinking, individuals and families who evaluate their patterns of thinking and acting are more likely to make sound judgments about what action they should take on food consumption concerns.

- Evaluating patterns of thinking and acting involves
 - ... establishing criteria to determine how closely a pattern of thinking and acting brings one to accomplishing valued goals.
 - ... reviewing criteria by taking into account several different perspectives, the immediate and long-range timeframe, and possible value conflicts.
 - ... giving reasons to support the criteria selected.
- Another part of this process involves giving reasons to support the evaluations made.
 - ... Reasons used in supporting evaluations are based on both factual claims and value standards held by individuals and families.
 - ... Different standards of quality are used to examine these factual and value claims.
 - ... Factual claims are examined for truth and accuracy (Metcalf, 1980).
 - ... Value claims are examined in terms of their consequences and underlying value principles.
 - ... The quality of the reasoning on which the evaluation is based is determined by examining whether the conclusion(s) follows from the reasons given.

Module D

- ▼ ***How individuals and families obtain food is a concern because their ends vary.*** Valued ends are goals or results that individuals and families consider important to achieve.
 - Some families work together on critically examining, conceptualizing, and justifying their goals.
 - In other families goals are not discussed but are evident in what families say and do.

Food-related goals and the actions taken to achieve them are based on values.

- Basic values are applied in multiple contexts. Other values are more specific and relative to certain people or groups.
- Values can be distinguished from other human motives such as needs, desires, and preferences.
 - ... Values are criteria or standards of worth for judging the best course of action to take in a given situation. Commitment to freedom, equality, and truth are considered basic values.
 - ... Needs arise from a lack of something considered necessary for survival. For example, eating sustains life, reduces hunger, and fulfills the psychological need for food.
 - ... Desires arise to satisfy wants (for food, warmth, acceptance, status) and may not be necessary for survival; they push people toward satisfaction of wants, but may be suppressed. For example, the desire for chocolate may stem from a want to eat something sweet. The desire for lobster may stem from a wish for status.

- ... A preference can be thought of as liking something. Preferences, for example liking spinach better than broccoli, do not require justification.
- These motives push and pull people into action; conflict among these motives is inevitable.
- Values are not the same as value judgments.
 - ... Values are criteria or standards people use to judge worth. They are used whenever alternatives exist.
 - ... Value judgments are conclusions people draw about what to believe or do. They are based on facts and values. Values are evident in the reasons people give to support their judgments.
- Alternative ends or goals should be evaluated by individuals and families for their appropriateness and reasonableness.

▼ *Individuals and families can make reasoned judgments about which ends or goals are best to pursue in getting food.*

The process of making reasoned judgments includes the following:

- Make explicit the question or judgment to be made. (For example, everyone ought to be concerned about the interdependent relationships involved in getting food.)
- Clarify and define major concepts. (For example, interdependent relationships means...)
- Give reasons to support the judgment. (For example, everyone ought to be concerned about the interdependent relationships involved in getting food because...)
- Identify reasons as factual or value claims. Test their adequacy.
 - ... Factual claims (empirical statements) are tested for relevance and accuracy.
 - ... Value claims (statements about standards of worth) are justified by examining the probable consequences or implications they have for survival and the quality of life.
- Resolve differences in values, including intrapersonal and interpersonal conflicts that arise in the reasoning process. Use the role exchange and the universal consequences test.
 - ... In the role exchange test, one imagines being in the place of the people most disadvantaged by application of the value principle. The value judgment is accepted or rejected from this perspective. What is it like to be in this role? How does it feel?
 - ... In the universal consequences test, one considers what would happen if everyone held these values. The judgment is accepted or rejected in light of these consequences. What would happen if everyone did that? How would you like it if everyone did that?
- Identify the point of view underlying the reasons given to support the value judgment. In reasoning about values, principles of justice, reciprocity, and concern for others are given priority.

The reasoning is judged on whether the conclusions follow from the reasons given.

If the facts supporting the judgment are accurate and genuinely relevant, if the values withstand the role exchange and universal consequences tests, and if the reasoning is sound, then the judgment is considered acceptable.

Certain social skills are used when reasoning about values.

- Communicative interaction is used to clarify meanings and to probe for underlying reasons.
- Perspective taking explores how different people would view particular events, conditions, or elements of the situation.

▼ *Many contextual factors affect the individual's or family's ability to pursue valued ends.*

Availability and use of scarce resources influence access to a safe food supply.

- Resources used to achieve a safe food supply include time, energy, money, and abilities.
- Sometimes the amount and kinds of available resources are beyond an individual's or family's control.

Control by government and corporations may limit or prevent access to a safe food supply.

- Countries may use food for political purposes, such as when countries give food assistance as a reward to other countries for certain actions.
- Government distribution of food is another means of controlling access to food, such as rationing and distribution of surplus farm commodities.
- Consumers may find a product is no longer available because the manufacturer chose to remove a low-profit item from the market in favor of one that will make a higher profit.

Food processing and handling also influences the family's ability to secure a safe food supply.

The way the consumer obtains, stores, and uses food is another contextual factor.

- When food is not stored properly, it spoils.
- Food poisoning may result from improper handling of food.

▼ *Consumer choices on how to obtain, store, and use food have consequences for families and societies.*

Individuals and families generate alternative means to reach their goals.

Choosing among alternative courses of action involves considering which alternative is most likely to produce the best set of consequences.

- Each alternative might influence people in positive or negative ways.
- Since people's lives are interdependent, it is important to think about the consequences of the alternative on all parties involved in the situation.
- All perspectives are treated equally unless there are relevant differences.

Probable consequences of alternative action strategies are evaluated in light of ends or goals and the context in which the food concern arises.

Module E

▼ *Making reasoned judgments enables individuals and families to take action regarding food.*

Practical reasoning is a skilled intellectual and social process that individuals and families can use to make reasoned judgments about food, its meaning in their lives, and ways to obtain and store it.

— Judgments about food are made in response to significant questions that arise in everyday life when there is a discrepancy between the existing state of affairs and the valued ends sought by the family. Families use discrepancy analysis to identify areas where improvement is needed.

— Before the judgment is made, four categories of questions are posed and answered through cooperative dialogue.

- ... Context questions refer to the personal, social, and historical aspects of a particular situation. Answers to context questions require interpretive skills.
- ... Valued end questions refer to the goals set by individuals and families. Commitment to freedom, equality, and truth are the predominant guiding principles used in evaluating what would happen if different goals were pursued.
- ... Means questions are used to determine courses of action and action strategies that people could take to accomplish valued ends.

- ... Consequence questions identify and weigh the short- and long-term consequences of various courses of action on individuals, family, society, and the world.
- Knowledge gained from this cooperative dialogue is used in reasoning about what to do.
- Cooperative dialogue is the reasoned interaction individuals and families use in examining different points of view. Using this process, individuals and families share the goal of finding the best answer. This process requires a respect for people and an open atmosphere.
- The reasoned judgment that results from this process is assessed for rationality (adequacy, relevance, coherence). The most compelling argument regarding what ought to be done is selected.

Different types of action are taken to address and answer significant food-related questions and concerns.

- Communicative interaction is oriented toward reaching an understanding about what action to take regarding food-related concerns.

- ... The process involves educating oneself and others about dimensions of context that affect the accomplishment of goals related to the work of the family.

- ... This knowledge is used to communicate with others about family goals. Families can join together in a cooperative effort, exchanging and testing ideas and making decisions as a group.

- Reflective action involves critically examining myths, assumptions, and beliefs underlying food-related actions.

- ... When communication breaks down, families can use critical reflection to identify factors that prevent or limit the pursuit of common interests and goals.

- ... Sometimes psychological (internal) or social (external) factors block thinking.

Psychological blocks include a technical mindset, hasty conclusions, and hidden assumptions regarding food.

Social blocks include hierarchical patterns of authority and distorted communication (such as unwarranted or excessive praise or punishment to shape food attitudes). The use of persuasive techniques that deceive also distort communications.

- Technical action involves examining technological information to generate alternative means to accomplish goals and transforming information about means into action strategies.

- ... Fair use of technical action involves open and critical examination of beliefs, the valued ends sought, and the consequences of upholding these goals.

- Families should examine alternative action strategies in terms of positive and negative implications and short- and long-term consequences.

The process of reflective thinking and action can be learned in the family and used systematically in daily life.

- When used systematically, reflective thinking and action help identify and accomplish food-related goals within the family.

- Systematic use of reflective thinking and action also contributes to societal development and the accomplishment of basic social needs and values.

Teaching About Controversial Issues

Adapted from a *Guide to Curriculum Planning*. (Madison, WI: Wisconsin Department of Public Instruction, 1985).

In a democratic society, people must be free to seek information, debate issues, reach independent judgments, and express their values and ideas. While the Bill of Rights guarantees these necessary freedoms, no law can directly foster free thought and action.

One of the major responsibilities of the public schools in a democracy, therefore, is to provide opportunities for students to develop and practice critical thinking skills. Among these skills are

- the ability to gather information, both written and oral;
- the abilities to express and listen to diverse viewpoints;
- the ability to reach fair and reasonable judgments; and
- the ability to express personal and aesthetic values and ideas.

In order for students to develop these abilities, many people must play their roles.

- Teachers must
 - provide appropriate and balanced information and ideas;
 - provide guidance to students as they seek learning resources;
 - teach analysis, synthesis, evaluation, and application skills;
 - provide opportunities for thought, discussion, and expression; and
 - foster independent thinking.
- Teachers, librarians, and school officials must
 - be free to select materials appropriate to the varied abilities of their students and to the curricula of the school and
 - encourage students to identify appropriate and varied sources of knowledge.
- Parents must
 - take an active interest in the learning of their children and
 - balance concerns for their own children's education with respect for the rights of other parents' children to have an appropriate range of experiences.
- Students must
 - be free to inquire and to express their judgments;
 - be free to express themselves intellectually, aesthetically, and emotionally;
 - learn to respect views that differ from their own; and
 - be aware of the responsibilities as well as the rights of citizenship.

Support materials in this guide often raise controversial issues. They are examples of materials teachers might use to foster discussion and are not included in this guide as endorsements of particular points of view. Teachers are encouraged to ask students to bring in articles representing different points of view. Teachers should also consider community norms when deciding what materials to include in lessons.